

# TOWN OF CLINTON, MASSACHUSETTS

## GREELEY STREET

### ROADWAY IMPROVEMENT PROJECT

### MARCH 31, 2021

#### TOWN OF CLINTON

CHRISTOPHER MCGOWN  
DEPARTMENT OF PUBLIC WORKS, SUPERINTENDENT

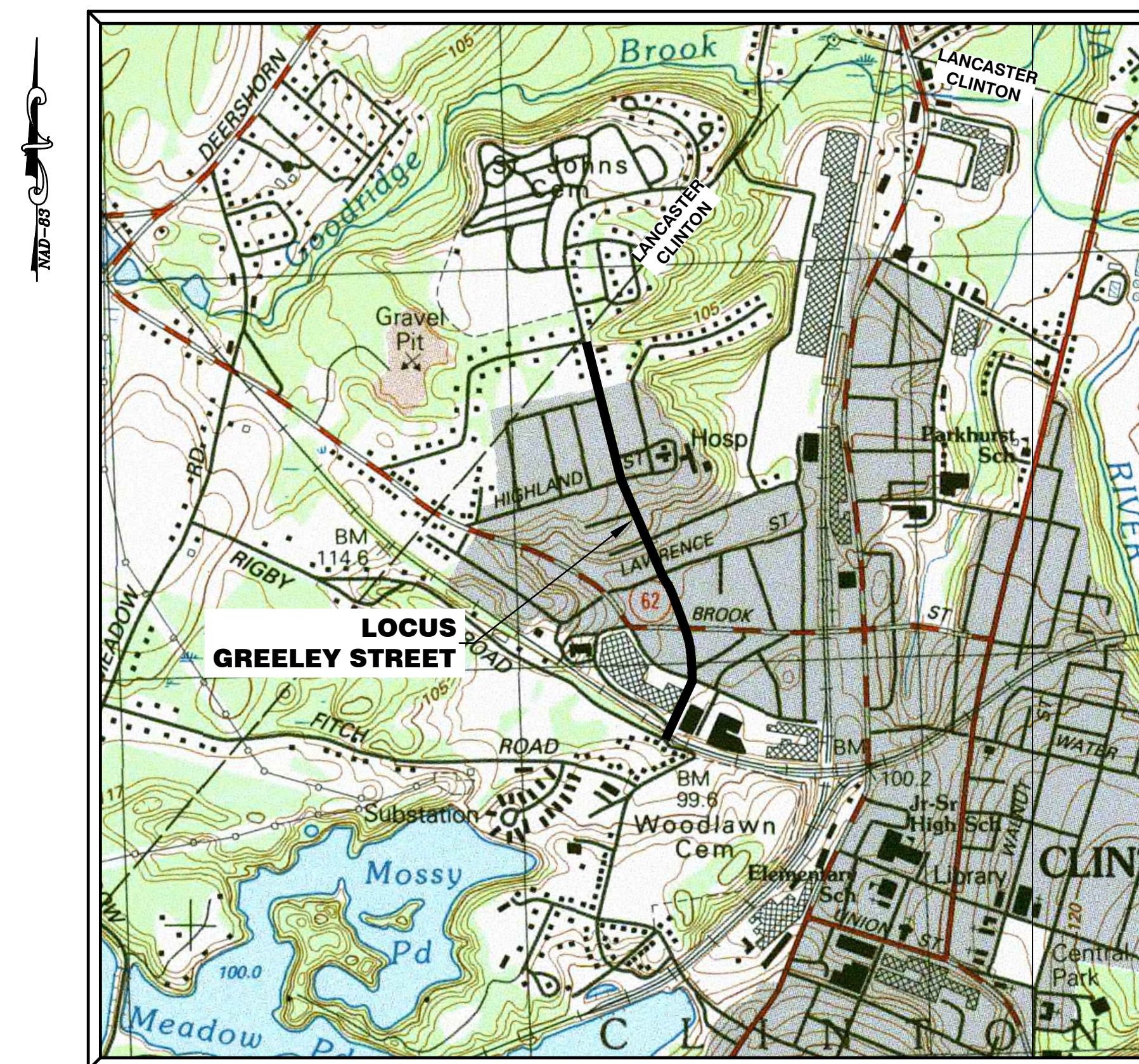


IMAGE OBTAINED FROM: "OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS"

LOCUS PLAN  
SCALE : 1" = 1,000'±



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BID SET

GCG ASSOCIATES INC. CONSULTING ENGINEERS WILMINGTON, MASSACHUSETTS

PLAN 1 OF 8  
DATE: MARCH 31, 2021



GENERAL NOTES

1. PLANS AND TOPOGRAPHIC INFORMATION ARE PREPARED FROM A GROUND INSTRUMENT SURVEY PERFORMED BY GCG ASSOCIATES, INC. JANUARY 2017 TO MARCH 2020.
2. THE LOCATIONS AND ELEVATIONS SHOWN REFER TO MASSACHUSETTS STATE PLANE COORDINATE SYSTEM. (NAD 83–NAVD 88).
3. CONTOUR INTERVAL: 1 FOOT
4. PROPERTY LINES AND SIDELINES WERE ESTABLISHED, APPROXIMATELY, FROM MASS GIS DATA LAYERS.
5. THE LOCATIONS OF SUBSURFACE UTILITIES AND STRUCTURES WERE OBTAINED FROM AVAILABLE TOWN AND UTILITY RECORDS. THE SIZE, TYPE AND LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL PROPERLY LOCATE THE UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN UTILITY INFORMATION BY CONTACTING DIGSAFE (811). THE CONTRACTOR SHALL EXCAVATE TEST PITS TO VERIFY UTILITY LINES.
6. SUBSURFACE UTILITY LINES, AS SHOWN HEREON, WERE COMPILED ACCORDING TO AVAILABLE RECORD INFORMATION FROM THE REFERENCED UTILITY COMPANIES AND THE TOWN OF CLINTON. THE LOCATIONS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. GCG ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
7. GENERALLY THE LINES IN THE PUBLIC AND PRIVATE WAYS ARE SHOWN AND THE LATERAL CONNECTIONS SERVING INDIVIDUAL USERS ARE NOT SHOWN. BEFORE DESIGNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITIES MUST BE CONSULTED.
8. BEFORE CONSTRUCTION, ALL UTILITIES, PUBLIC AND PRIVATE MUST BE NOTIFIED (SEE MASSACHUSETTS GENERAL LAWS, CHAPTER 82 SECTION 40.) CALL "DIG SAFE" (811) HTTP://WWW.DIGSAFE.COM
9. WATER MAINS ARE ASSUMED TO BE 5 FEET BELOW THE EXISTING GROUND SURFACE. GAS LINES ARE ASSUMED TO BE 3 FEET BELOW THE EXISTING GROUND SURFACE. TELEPHONE AND ELECTRIC CONDUIT ARE ASSUMED TO BE 2 FEET BELOW THE EXISTING GROUND SURFACE.
10. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A CONSTRUCTION SCHEDULE DELINEATING THE SEQUENCE OF WORK, TRAFFIC MANAGEMENT PLAN AND ESTIMATED TIME OF COMPLETION OF EACH SEGMENT OF WORK, PRIOR TO THE COMMENCEMENT OF WORK.
11. THE CONTRACTOR SHALL MAINTAIN CONTINUOUS TRAFFIC FLOW DURING CONSTRUCTION SATISFACTORY TO THE ENGINEER AND THE TOWN OF CLINTON. NO EQUIPMENT SHALL BE ALLOWED TO BE PARKED ON THE ROAD WHEN NOT IN USE. MATERIALS SHALL NOT BE STOCKPILED ON THE ROAD.
12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES AND PROCEDURES, AND FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ALL WORK INCLUDED UNDER THIS CONTRACT. THE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL SAFETY BARRIERS, WARNING FLASHERS AND THE LIKE, AS REQUIRED BY THE CONDUCT OF THE WORK FOR THE PROTECTION OF WORKERS AND NON–WORKERS ALIKE. THE CONTRACTORS ATTENTION IS DIRECTED TO OSHA REQUIREMENTS.
13. ALL CONSTRUCTION SIGNING SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MASSDOT) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
14. PRIOR TO THE PROPOSED CONSTRUCTION ON GREELEY STREET, THE CONTRACTOR SHALL SUBMIT FOR REVIEW BY THE TOWN, A TRAFFIC MANAGEMENT PLAN IN COMPLIANCE WITH MASSDOT AND MUTCD. SAID PLAN WILL SHOW HOW TRAFFIC FLOW WILL BE HANDLED DURING CONSTRUCTION. PAYMENT UNDER THE ASSOCIATED ITEM.
15. AREAS OF BASE AND BINDER PAVEMENT WHICH NEED TO BE REPLACED AFTER MILLING SHALL BE EXCAVATED AND REPAVED AT THE DIRECTION OF THE TOWN. THE EXCAVATION SHALL BE PAID FOR UNDER UNCLASSIFIED EXCAVATION. GRAVEL AND PAVEMENT SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM.
16. UNCLASSIFIED EXCAVATION SHALL INCLUDE REMOVAL OF SOIL, CONCRETE AND BITUMINOUS CONCRETE, AND ANY OTHER MATERIAL ENCOUNTERED EXCEPT ROCK.
17. THE EXACT LOCATION THAT EACH DRIVEWAY SHALL BE CUT BACK SHALL BE DETERMINED IN THE FIELD.

TREE REMOVAL AND TRIMMING NOTES

1. THE CONTRACTOR SHALL REMOVE TREES AND STUMPS AS IDENTIFIED ON PLANS AND SHALL NOT REMOVE ANY TREES UNTIL APPROVED BY THE ENGINEER.
2. ALL TREE AND ROOT REMOVAL AND TREE TRIMMING SHALL BE PERFORMED BY A MASSACHUSETTS CERTIFIED ARBORIST.
3. ROOTS ON TREES WHICH ARE IMPACTING THE SAFETY OF THE STREET OR AFFECTING SIDEWALKS SHALL BE REMOVED BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL REMOVE OVERGROWN VEGETATION ALONG SIDEWALKS AS NEEDED.
5. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED.

GREELEY STREET RECONSTRUCTION NOTES

1. ALL TRENCHES WILL BE PUDDLED OR JETTED WITH WATER TO ALLOW PROPER SETTLEMENT. TRENCHES THAT CANNOT BE JETTED WILL BE MECHANICALLY COMPACTED AS DETERMINED BY THE ENGINEER. ALL TRENCHES WILL BE COMPACTED TO 95% COMPACTION. INCLUDE PAYMENT UNDER ASSOCIATED ITEM.
2. AFTER THE COMPACTION PROCESS IS COMPLETED, THE CONTRACTOR SHALL MAINTAIN TRENCH GRAVEL FLUSH TO EXISTING GRADE UNTIL GREELEY STREET IS RECONSTRUCTED IF REQUIRED BY THE ENGINEER, TRENCH PAVING SHALL BE INSTALLED TO STABILIZE AREAS AS NEEDED.
3. PRIOR TO RECLAIMING, THE CONTRACTOR SHALL COMPLETE ALL EXCAVATING AND PREPARING SUBGRADE REQUIRED TO PULVERIZE THE PAVEMENT AND SHALL LOWER ALL CASTINGS AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.
4. THE ROADWAY SHALL BE RECLAIMED TO A MINIMUM DEPTH OF 16" WITHIN THE SPECIFIED LIMITS. THE EXISTING PAVEMENT SHALL BE PULVERIZED TO THE POINT WHERE NO MATERIAL IS GREATER THAN 3".
5. THE CONTRACTOR SHALL RECLAIM THE ENTIRE WIDTH OF EXISTING PAVEMENT. THE LIMITS (EDGE OF PAVEMENT) OF THE EXISTING PAVED SURFACE ARE SHOWN IN THE PLAN VIEW OF THESE CONSTRUCTION DRAWINGS.
6. AFTER PULVERIZING THE ROADWAY ASPHALT PAVEMENT AND UNDERLYING MATERIALS THE CONTRACTOR SHALL REMOVE AND STOCKPILE (WINDROW) THE RECLAIMED MATERIAL. THE CONTRACTOR SHALL THEN EXCAVATE AND REMOVE THE NECESSARY SUBGRADE MATERIAL IN ORDER TO MEET THE FINAL GRADES OF THE ROADWAY. THE CONTRACTOR SHALL THEN PLACE, GRADE AND COMPACT THE EXISTING RECLAIMED BASE COURSE TO A 12" DEPTH AS SHOWN ON THE TYPICAL ROADWAY CROSS SECTION. THE SUBBASE SHALL THEN BE FINE GRADED AND COMPACTED TO ALLOW FOR THE PLACEMENT OF: 2–1/2" BASE COURSE (BINDER COURSE PAVEMENT – M3.11.03 – TABLE "A") AND 1–1/2" WEARING COURSE (TOP COURSE PAVEMENT – M3.11.03 – TABLE "A").
7. THE CONTRACTOR SHALL GRADE THE EXISTING RECLAIMED SUBBASE MATERIAL OR GRAVEL BORROW MATERIAL TO ALLOW THE FINAL PAVEMENT SURFACE TO MATCH THE EXISTING EDGE OF PAVEMENT GRADES UNLESS OTHERWISE NOTED. ANY GRADING MODIFICATIONS SHALL DIRECT DRAINAGE TOWARDS THE CLOSED DRAINAGE SYSTEM AND AWAY FROM PRIVATE PROPERTY.
8. ALL PROPOSED CUTS AND FILLS REQUIRED TO GRADE THE RECLAIMED MATERIAL TO A 12" DEPTH SHALL BE INCLUDED FOR PAYMENT UNDER THE ASSOCIATED RECLAIM ITEM.
9. ALL DRAINAGE AND UTILITY CASTINGS SHALL BE LOWERED OR REMOVED AND PLATED PRIOR TO RECLAIMING THE ROADWAY. ALL STRUCTURES MUST BE LOWERED TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE PROPOSED RECLAIMED BASE COURSE AND ACCOMMODATE ALL CUTS AND FILLS.
10. THE CONTRACTOR SHALL FINE GRADE THE EXISTING RECLAIMED BASE COURSE MATERIAL NO MORE THAN 24 HOURS PRIOR TO THE PLACEMENT OF THE 2 1/2" BASE COURSE PAVEMENT. ALL GRADING, COMPACTION AND DUST CONTROL ASSOCIATED WITH FINE GRADING TO BE INCLUDED IN THE ASSOCIATED ITEM.
11. THE CONTRACTOR SHALL STOCKPILE AND RETAIN SUFFICIENT SURPLUS SUBBASE AND RECLAIMED PAVEMENT MATERIALS TO USE AS NEEDED IN THE ENTIRE PROJECT AREA. THE COSTS ASSOCIATED WITH THE EXCAVATION, PLACEMENT AND DISPOSAL OF SURPLUS SUBBASE MATERIAL SHALL BE INCLUDED IN THE RECLAIM ITEM. NO ADDITIONAL PAYMENT FOR PLACEMENT SHALL BE MADE. SURPLUS SUBBASE AND RECLAIMED PAVEMENT SUBBASE MATERIAL SHALL BE USED ONSITE PRIOR TO IMPORTING GRAVEL BORROW MATERIAL. ANY EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO ADDITIONAL PAYMENT FOR PLACEMENT OR DISPOSAL SHALL BE MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTION TESTING. TESTING SHALL BE PERFORMED AT INTERVALS OF 100 FEET ALONG THE ROADWAY. SEE SPECIFICATIONS FOR COMPACTION CONTROL AND TESTING.
13. PRIOR TO COMPLETING FINAL GRADING OF THE RECLAIMED BASE COURSE, THE ENGINEER SHALL REVIEW GRADES TO DETERMINE THAT SUFFICIENT CROSS SLOPES AND POSITIVE DRAINAGE FLOWS HAVE BEEN MAINTAINED. IF GRADES NEED TO BE ADJUSTED, THE CONTRACTOR SHALL REGRADE AS DIRECTED.
14. CROSS SLOPES AT CATCH BASINS SHALL BE ADJUSTED AS NECESSARY TO ASSURE PROPER DRAINAGE.
15. CONTRACTOR SHALL CONTROL DUST DURING CONSTRUCTION BY USING CALCIUM CHLORIDE AS NECESSARY.
16. EXISTING SEWER/DRAINAGE STRUCTURES SHALL BE ADJUSTED OR REMODELED AS REQUIRED TO MEET GRADE.
17. SHOULDERS OF DRIVEWAY AND PARKING AREAS SHALL BE GRADED FOR A SMOOTH TRANSITION FROM THE PROPOSED EDGE OF PAVEMENT/CURB TO THE EXISTING GRADE.

RAISING CASTINGS

1. PRIOR TO RECLAIMING THE EXISTING PAVEMENT, ALL CASTINGS SHALL BE REMOVED AND STRUCTURES PLATED AT A 16" MINIMUM DEPTH.
2. ALL CASTINGS WILL BE RAISED TO BINDER GRADE AFTER PLACEMENT OF THE 2 1/2" BINDER PAVING COURSE.
3. ALL CASTINGS WILL BE RAISED TO FINISH GRADE PRIOR TO PLACEMENT OF THE 1 1/2" FINAL PAVING COURSE.

CATCH BASIN CLEANING NOTES

1. ALL CATCH BASINS SHALL BE CLEANED UPON COMPLETION OF WORK. ALL ACCUMULATED SEDIMENT, DEBRIS, ORGANIC MATTER, ETC. SHOULD BE REMOVED FROM CATCH BASINS AND DRAINAGE SYSTEMS.
2. ALL SEDIMENT AND DEBRIS REMOVED FROM THE CATCH BASIN OR PIPE LINE SHALL BE PROPERLY HANDLED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.
3. ANY REQUIRED MAINTENANCE OR REPAIRS NOTED DURING CLEANING SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER IMMEDIATELY.

SITE EROSION & SEDIMENT CONTROL NOTES

1. CONSTRUCTION PERIOD SILT SACKS SHALL BE USED AT ALL CATCH BASINS. SILT SACKS SHALL BE KEPT FREE OF SEDIMENT AND DEBRIS, INSPECTED WEEKLY AND REPAIRED PROMPTLY.
2. PER 310CMR 10.02(2)(b)1.p. – THE ROADS AND DRIVES "MUST BE STABILIZED WITHIN 72 HOURS OF COMPLETION OF THE RECLAMATION.

FINE GRADING AND COMPACTING

1. THE CONTRACTOR SHALL FINE GRADE AND COMPACT ALL AREAS IN PREPARATION FOR PAVEMENT, INCLUDING, BUT NOT LIMITED TO THE DRIVEWAY AREAS AND TRANSITION DRIVEWAY AREAS. THE CONTRACTOR SHALL ALSO STRAIGHT CUT ALL EXISTING JOINTS AND EDGES IN PREPARATION FOR FINAL PAVEMENT.
2. PAYMENT FOR GRADING AND COMPACTING THE RECONSTRUCTED SIDEWALK SHALL BE INCLUDED IN THE CONTRACT PRICE.
3. PAYMENT FOR FINE GRADING AND COMPACTING THE RECONSTRUCTED DRIVEWAY AND PARKING AREAS SHALL BE INCLUDED IN THE CONTRACT PRICE.

MISCELLANEOUS NOTES

1. THE CONTRACTOR SHALL CUT JOINTS IN THE EXISTING PAVEMENT AREAS WHERE THE PROPOSED PAVEMENT SHALL MEET TO ALLOW A SMOOTH TRANSITION AFTER PAYING. ALL JOINTS SHALL BE SANDED AND SEALED.
2. THE CONTRACTOR WILL INSTALL ALL TEMPORARY SEDIMENTATION BARRIERS AS REQUIRED DURING CONSTRUCTION.
3. EXISTING GRATES, FRAMES AND COVERS REMOVED FROM THE WORK SHALL BE DELIVERED TO THE CLINTON RECYCLING CENTER BY THE CONTRACTOR.
4. ALL TRENCHES SHALL BE SAWCUT ONLY. NO OTHER METHOD OF CUTTING THE EXISTING PAVEMENT SHALL BE ACCEPTABLE. NO SEPARATE PAYMENTS SHALL BE MADE FOR THIS CUTTING.
5. POLICE DETAILS FOR TRAFFIC CONTROL WILL BE PAID FOR DIRECTLY BY THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE ALL DETAIL ASSIGNMENTS.
6. THE CONTRACTOR SHALL LOAM & SEED ALL DISTURBED AREAS.
7. THE CONTRACTOR SHALL PROVIDE GENERAL CLEAN–UP TO THE ENTIRE PROJECT SITE. INCLUDE PAYMENT UNDER APPROPRIATE ITEM.
8. ALL CASTINGS, GATE BOXES, ETC. DAMAGED DURING CONSTRUCTION SHALL BE SUPPLIED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. THE CONTRACTOR SHALL INCLUDE THE COST IN ALL BID ITEMS.
9. THE CONTRACTOR SHALL BE PAID FOR WORK REQUIRED TO SUPPORT OR REMOVE AND REPLACE EXISTING STRUCTURES AND UTILITY LINES ADJACENT TO OR WITHIN THE LIMITS OF TRENCH EXCAVATION UNDER THE MISCELLANEOUS WORK ITEM.
10. THE CONTRACTOR SHALL SAWCUT ALL PRIVATE DRIVEWAYS AND SIDEWALKS AS REQUIRED BEYOND THE RIGHT–OF–WAY TO ALLOW FOR PROPER TRANSITIONING TO THE PROPOSED FINISHED SURFACE AS NECESSARY. THE ENGINEER IN THE FIELD SHALL DETERMINE WHICH DRIVEWAYS/SIDEWALKS REQUIRE REMOVAL OF EXISTING PAVEMENT AND REPLACEMENT.

CURB AND SIDEWALK NOTES

1. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED WITH 4000 PSI – 3/4" AGGREGATE CEMENT CONCRETE WITH REINFORCEMENT AND WITH A BROOM FINISH ACCORDING TO THE CONSTRUCTION DETAILS AND AS SPECIFIED.
2. CEMENT CONCRETE WALKS SHALL BE A OF MINIMUM 4" THICK. CEMENT CONCRETE RAMPS AND DRIVEWAY APRONS SHALL BE A MINIMUM OF 6" THICK.
3. ALL GRANITE CURB SHALL BE TYPE VB AS SPECIFIED BY MASSDOT AND SHALL INCLUDE ALL LENGTHS – STRAIGHT, RADIUS, TRANSITION AND CURB INLETS.
4. NEW AND/OR SALVAGED GRANITE CURBING SHALL BE SET IN ACCORDANCE WITH THE CONSTRUCTION DETAIL PROVIDED IN CONTRACT DRAWINGS.
5. NEW AND/OR SALVAGED GRANITE CURBING SHALL BE INSTALLED BY THE CONTRACTOR AT THE NEW PROPOSED GRADES AND EDGE OF ROADWAY LINES AS DEPICTED ON THE PLANS.
6. TRANSITION CURBING AT DRIVEWAYS SHALL BE PAID UNDER THE TRANSITION CURB FOR WHEELCHAIR RAMPS ITEM.

ABBREVIATIONS

ALT	ALTERNATE
BB	BITUMINOUS BERM
BND	BOUND
BLDG	BUILDING
BIT CONC	BITUMINOUS CONCRETE
BM	BENCH MARK
BOL	BOLLARD
BRK	BRICK
CB	CATCH BASIN
CS	COMBINED SEWER
C	CONDUIT
CL	CENTERLINE
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CSMH	COMBINED SEWER MANHOLE
CST	COBBLESTONE
CULV	CULVERT
CO	COUNTY
CONC	CONCRETE
C.L.D.I.	CONC. LINED DUCTILE IRON
CLF	CHAIN LINK FENCE
DI	DUCTILE IRON PIPE
DR	DRIVE
DMH	DRAIN MANHOLE
EMH	ELECTRIC MANHOLE
EX	EXISTING
FAB	FIRE ALARM BOX
EOP	EDGE OF PAVEMENT
GC	GRANITE CURB
GG	GAS GATE
GS	GAS SERVICE
GIP	GALVANIZED IRON PIPE
HW	HEADWALL
HSE	HOUSE
HOR	HORIZONTAL
HYD	HYDRANT
HP	HIGH PRESSURE
LP	LIGHT POLE
MB	MAIL BOX
MH	MANHOLE
MIN	MINIMUM
PE	POLYETHYLENE PIPE
PROP	PROPOSED
R	APPROXIMATE PROPERTY LINE
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
ROW	APPROXIMATE RIGHT OF WAY
RR	RAILROAD
SB	STONE BOUND
S	SIGN
SMH	SEWER MANHOLE
STA	STATION
S	SEWER
SS	SEWER SERVICE
STL	STEEL
SW	SIDEWALK
TMH	TELEPHONE MANHOLE
TR	TREE
TYP	TYPICAL
UP	UTILITY POLE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
W	WATER MAIN
WG	WATER GATE
WD	WOOD
WIP	WROUGHT IRON PIPE
WS	WATER SERVICE
WSO	WATER SERVICE SHUTOFF
WV	WATER VALVE

LEGEND

	TEMPORARY BENCH MARK
	APPROX. HOUSE LOCATION
	EXISTING BUSH/SHRUB
	EXISTING TREE W/TRUNK DIA.
	EXISTING CATCH BASIN
	EXISTING DRAIN MANHOLE
	EXISTING SEWER MANHOLE
	EXISTING UNMARKED MANHOLE
	EXISTING HYDRANT
	EXISTING WATER GATE VALVE
	EXISTING WATER SHUT OFF
	EXISTING GAS GATE VALVE
	EXISTING LIGHT POST
	EXISTING UTILITY POLE
	EXISTING GUY WIRE ANCHOR
	EXISTING SIGN
	EXISTING TRAFFIC POLE
	EXISTING TRANSFORMER
	EXISTING GUY POLE
	EXISTING MAILBOX
	EXISTING BOULDER
	EXISTING BOUND
	EXISTING POST
	EXISTING GAS LINE
	EXISTING DRAIN LINE
	EXISTING WATER LINE
	EXISTING SEWER LINE
	EXISTING ELECTRIC LINE
	EXISTING OVERHEAD WIRE
	EXISTING 5' CONTOURS
	EXISTING 1' CONTOURS
	EXISTING SPOT GRADE
	EXISTING EDGE OF PAVEMENT
	EXISTING CURBING
	EXISTING FENCE CHAIN OR WIRE
	EXISTING WOOD FENCE
	EXISTING GUARD RAIL
	EXISTING VEGETATION LINE
	EXISTING WALL/ RETAINING WALL
	APPROX. PROPERTY LINE
	APPROX. RIGHT–OF–WAY LINE

BID SET

TOWN OF CLINTON  
NOTES AND LEGEND

GREELEY STREET  
CLINTON, MASSACHUSETTS  
WORCESTER COUNTY

GCG ASSOCIATES, INC.

WILMINGTON

MASSACHUSETTS

SCALE: AS NOTED

DATE: MARCH 31, 2021

JOB NO. \FILE NAME:

DESIGNED BY: J.P.G.

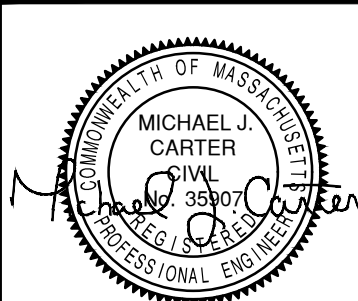
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1921–NOTES, LEGEND AND  
DETAILS

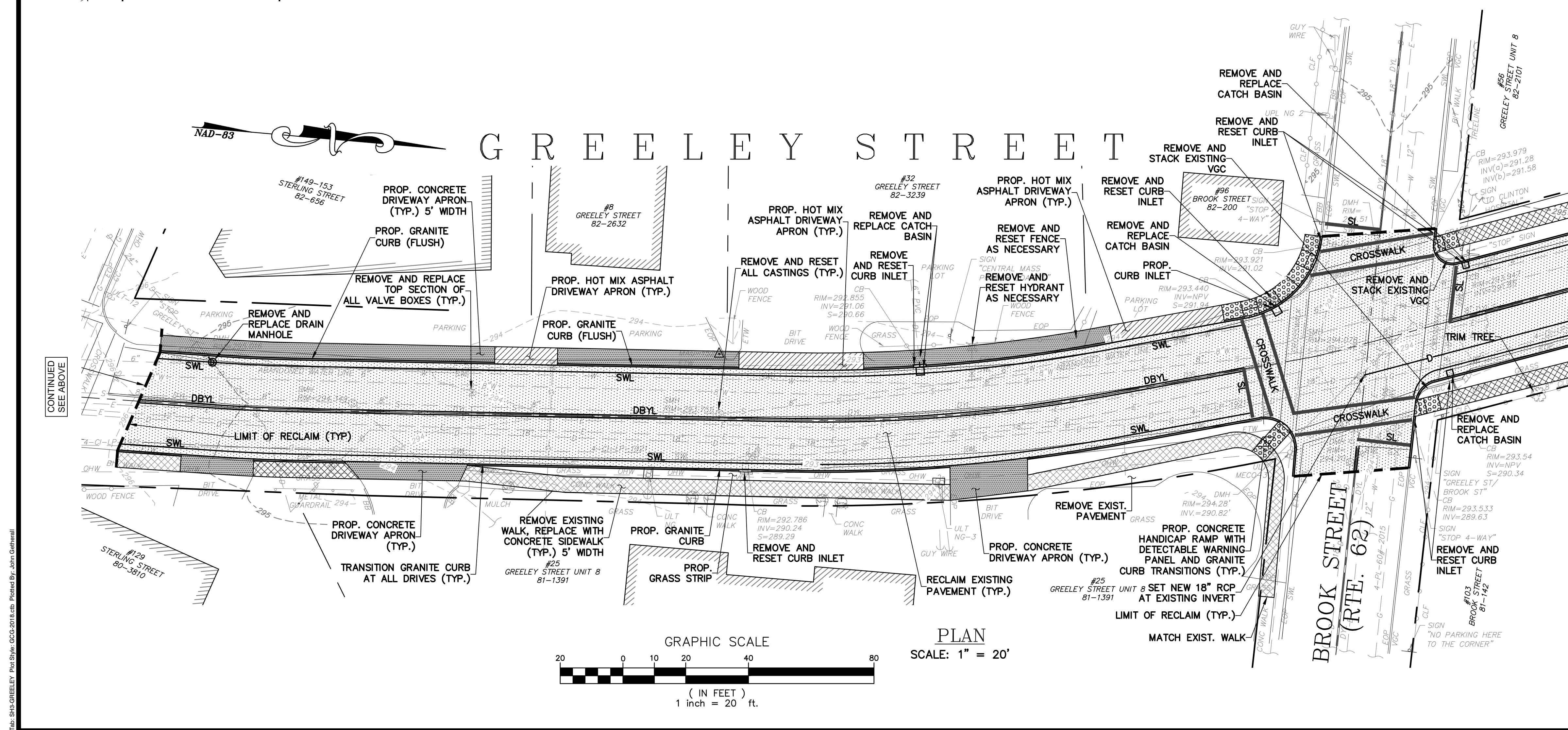
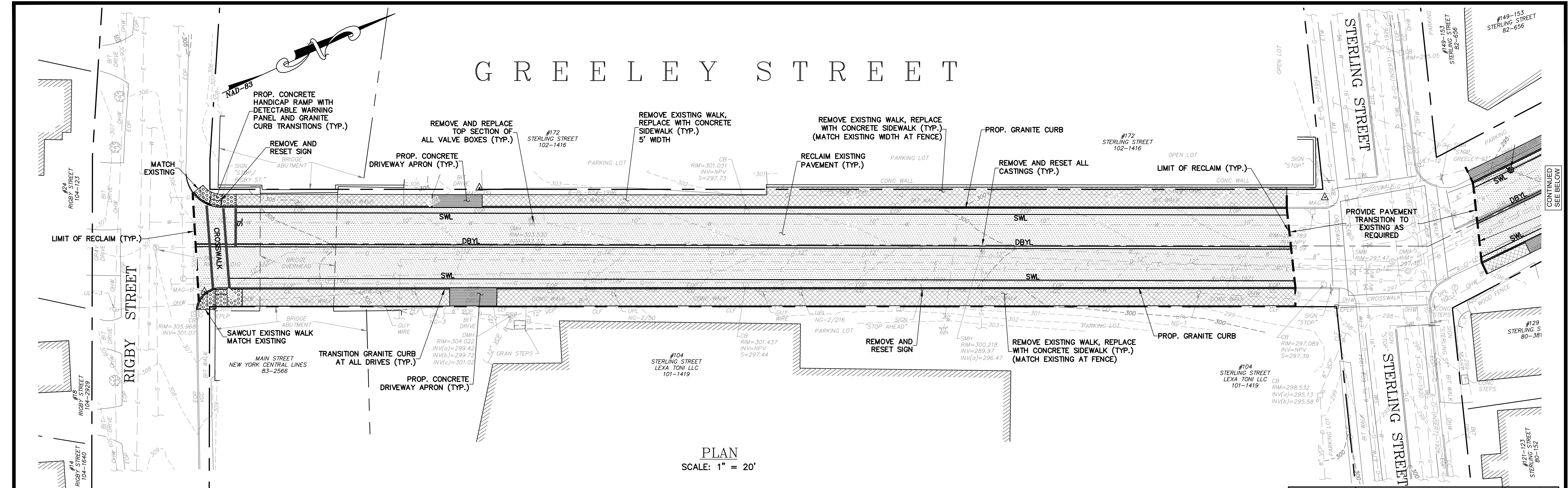
DRAWN BY: J.P.G.

CHECKED BY: M.J.C.

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EXISTING LEGEND	
	EX. DRAIN PIPE
	EX. SEWER PIPE
	EX. GAS MAIN
	EX. WATER MAIN
	APPROXIMATE PROPERTY LINE
	APPROXIMATE RIGHT OF WAY
	EXISTING EDGE OF PAVEMENT
SITE IMPROVEMENT LEGEND	
	RECLAIM EXISTING ROAD, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	MILL AND OVERLAY PAVEMENT
	1 1/2" MILL, 1 1/2" PAVEMENT OVERLAY ADD LEVELING COURSES AS REQUIRED
	CEMENT CONCRETE SIDEWALK
	REMOVE EXISTING WALK, REPLACE WITH 4" CEMENT CONCRETE SIDEWALK
	CEMENT CONCRETE DRIVEWAY APRON
	8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	HOT MIX ASPHALT DRIVEWAY APRON
	8" COMPACTED GRAVEL, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	CEMENT CONCRETE WHEELCHAIR RAMP
	8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	LIMIT OF WORK AS SPECIFIED
	GRANITE CURB
	CAPE COD BERM
	DRAINAGE PIPE

**BID SET**

**ROADWAY IMPROVEMENT PROJECT**  
**PROPOSED ROADWAY PLAN**

**GREELEY STREET**  
**CLINTON, MASSACHUSETTS**  
**WORCESTER COUNTY**

**GCG ASSOCIATES, INC.**

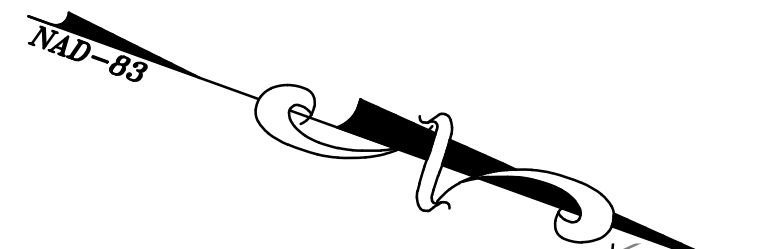
WILMINGTON MASSACHUSETTS

SCALE: 1" = 20' DATE: MARCH 31, 2021

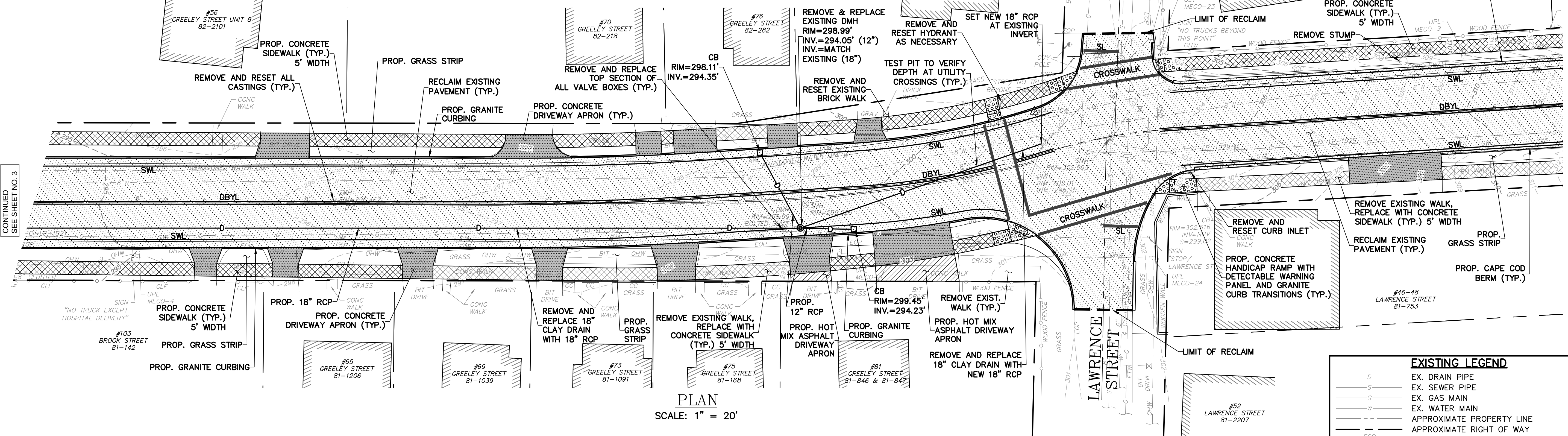
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1921-ROAD-5	DRAWN BY: J.P.G.	3 OF 8
	CHECKED BY: M.J.C.	

3/31/2020



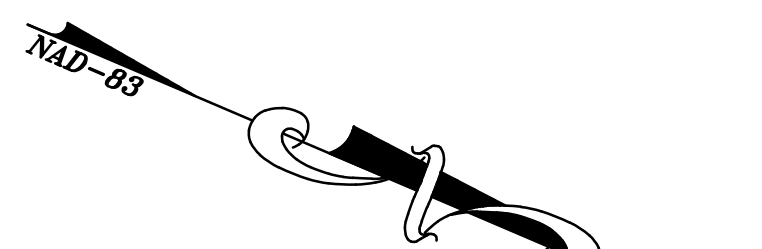


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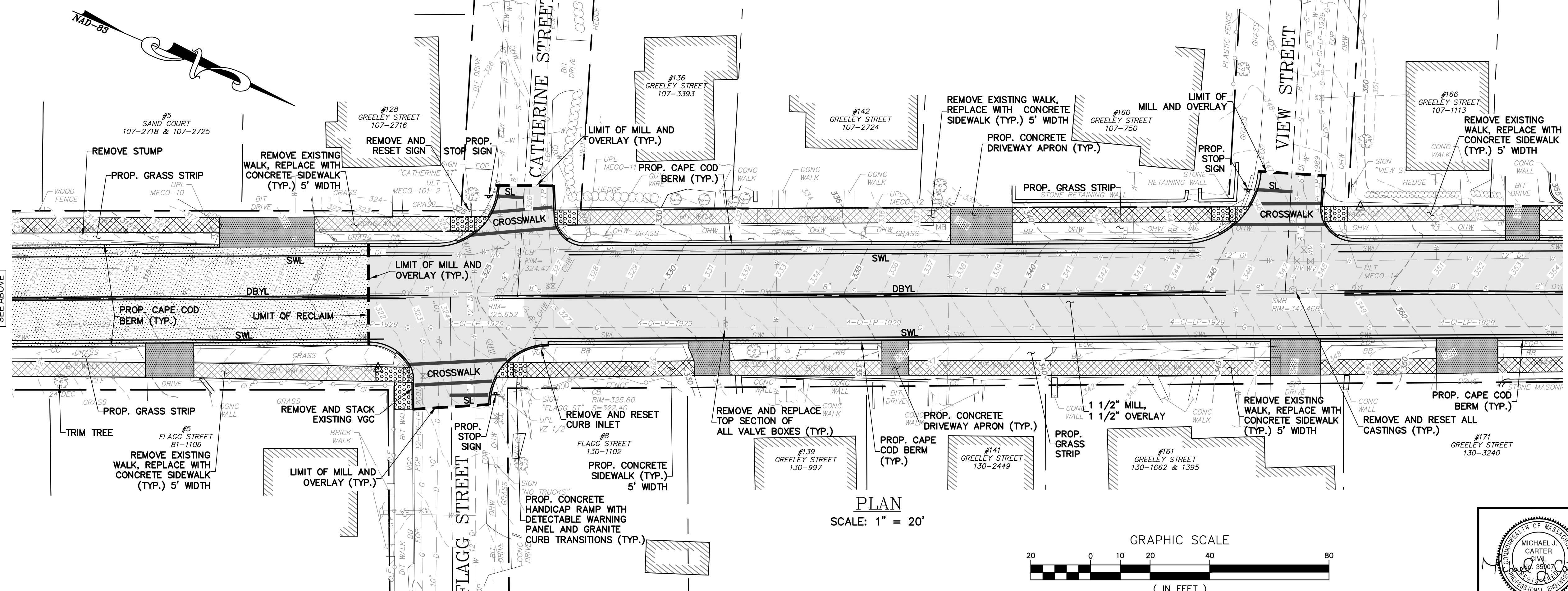


PLAN  
SCALE: 1" = 20'

CONTINUED  
SEE SHEET NO. 3



# GREELEY STREET

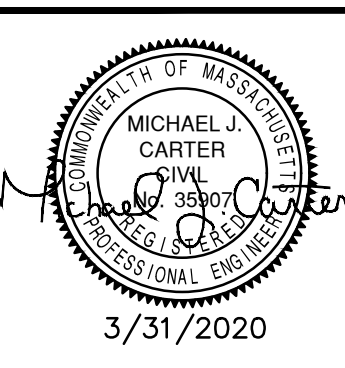
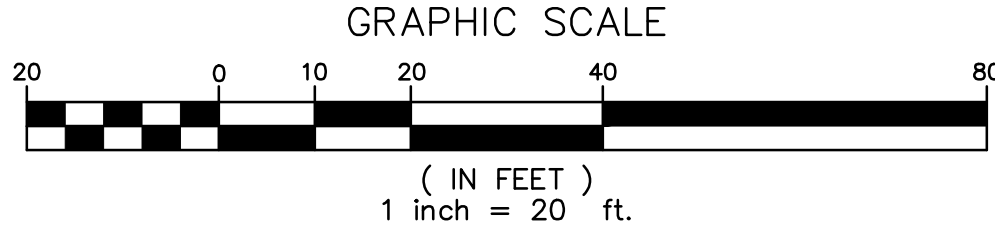


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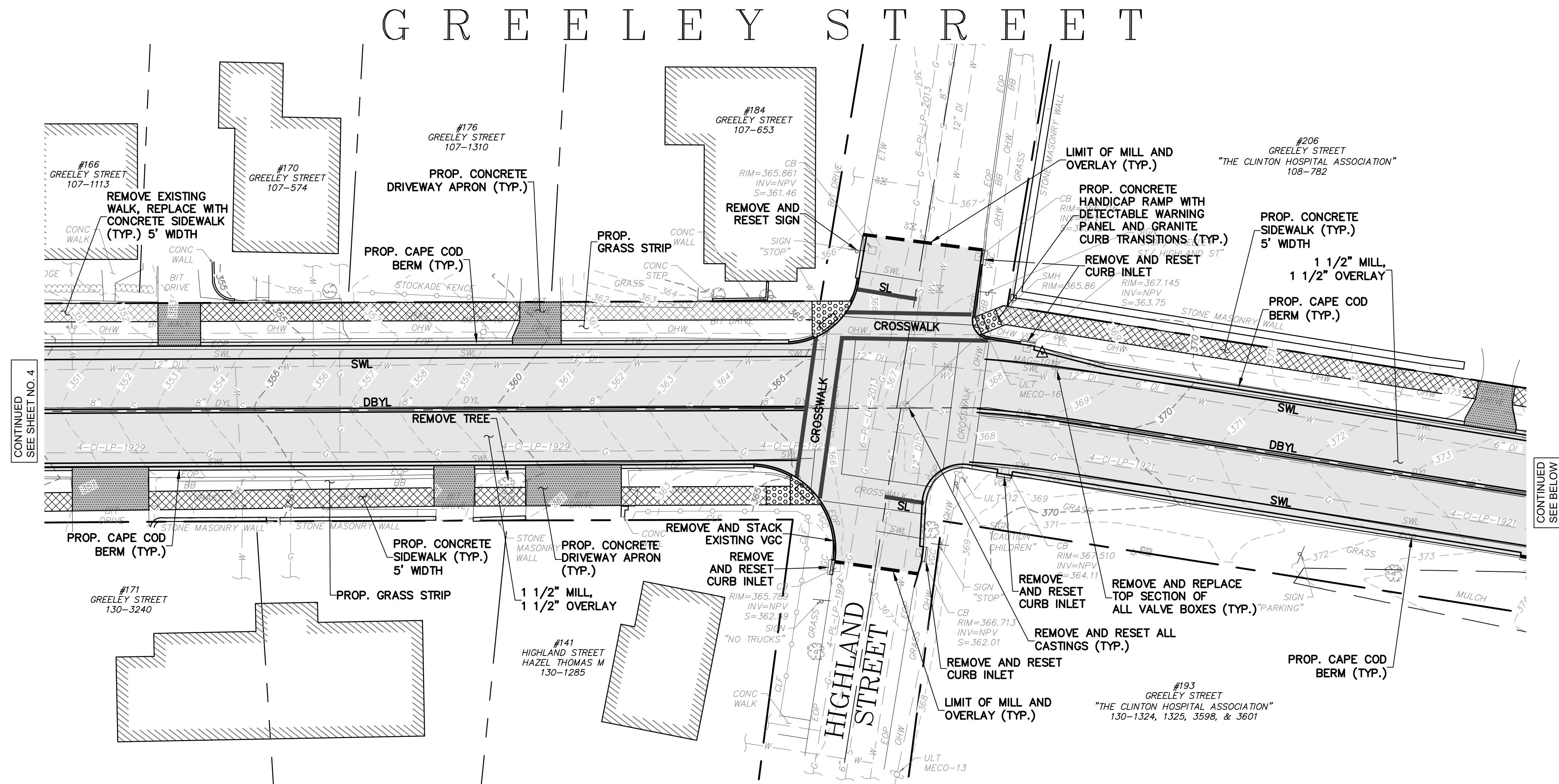
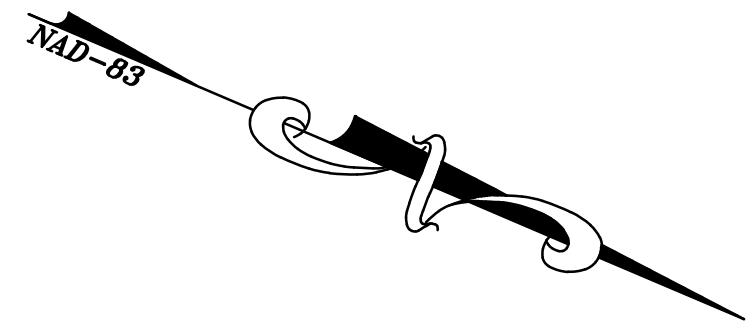
CONTINUED  
SEE SHEET NO. 5

EXISTING LEGEND	
	EX. DRAIN PIPE
	EX. SEWER PIPE
	EX. GAS MAIN
	EX. WATER MAIN
	APPROXIMATE PROPERTY LINE
	APPROXIMATE RIGHT OF WAY
	EXISTING EDGE OF PAVEMENT
SITE IMPROVEMENT LEGEND	
	RECLAIM EXISTING ROAD, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	MILL AND OVERLAY PAVEMENT
	1 1/2" MILL, 1 1/2" PAVEMENT OVERLAY ADD LEVELING COURSES AS REQUIRED
	CEMENT CONCRETE SIDEWALK
	8" COMPACTED GRAVEL, 4" CEMENT CONCRETE
	REMOVE EXISTING WALK, REPLACE WITH 4" CEMENT CONCRETE SIDEWALK
	CEMENT CONCRETE DRIVEWAY APRON
	8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	HOT MIX ASPHALT DRIVEWAY APRON
	8" COMPACTED GRAVEL, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	CEMENT CONCRETE WHEELCHAIR RAMP
	8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	LIMIT OF WORK AS SPECIFIED
	GRANITE CURB
	CAPE COD BERM
	DRAINAGE PIPE



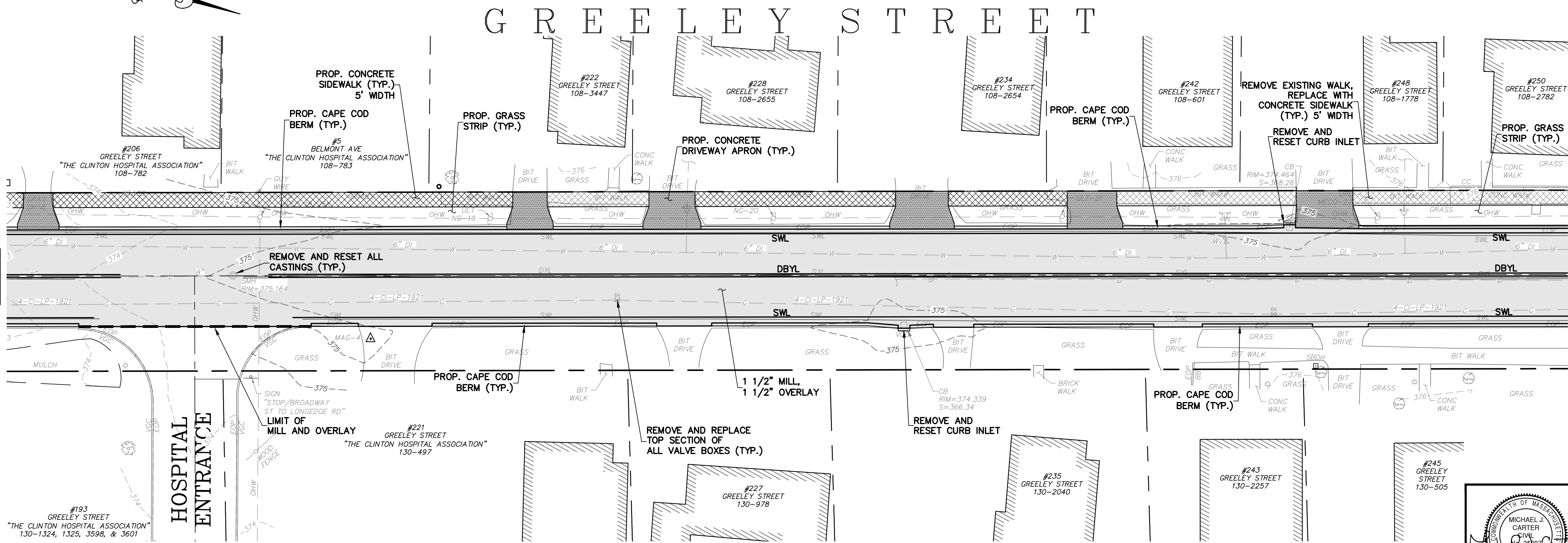
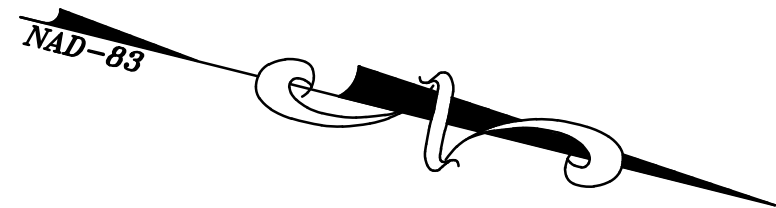
BID SET		
TOWN OF CLINTON PROPOSED ROADWAY PLAN		
GREELEY STREET CLINTON, MASSACHUSETTS WORCESTER COUNTY		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'		DATE: MARCH 31, 2021
JOB NO. \FILE NAME:	DESIGNED BY: R.S.T. DRAWN BY: J.P.G. CHECKED BY: M.J.C.	PLAN NO. 4 OF 8



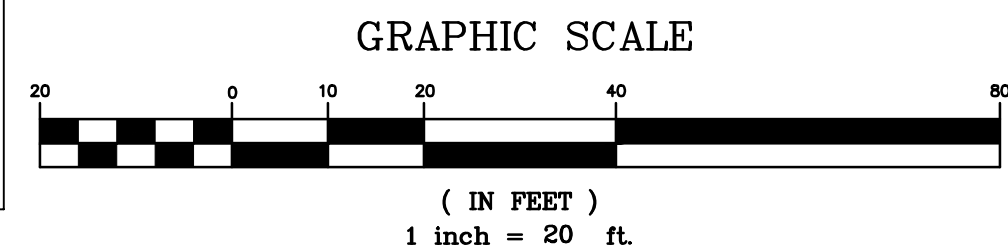


PLAN  
SCALE: 1" = 20'

EXISTING LEGEND	
	EX. DRAIN PIPE
	EX. SEWER PIPE
	EX. GAS MAIN
	EX. WATER MAIN
	APPROXIMATE PROPERTY LINE
	APPROXIMATE RIGHT OF WAY
	EXISTING EDGE OF PAVEMENT
SITE IMPROVEMENT LEGEND	
	RECLAIM EXISTING ROAD, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	MILL AND OVERLAY PAVEMENT 1 1/2" MILL, 1 1/2" PAVEMENT OVERLAY ADD LEVELING COURSES AS REQUIRED
	CEMENT CONCRETE SIDEWALK 8" COMPACTED GRAVEL, 4" CEMENT CONCRETE
	REMOVE EXISTING WALK, REPLACE WITH 4" CEMENT CONCRETE SIDEWALK
	CEMENT CONCRETE DRIVEWAY APRON 8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	HOT MIX ASPHALT DRIVEWAY APRON 8" COMPACTED GRAVEL, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	CEMENT CONCRETE WHEELCHAIR RAMP 8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	LIMIT OF WORK AS SPECIFIED
	GRANITE CURB
	CAPE COD BERM
	DRAINAGE PIPE



PLAN  
SCALE: 1" = 20'



BID SET

TOWN OF CLINTON  
PROPOSED ROADWAY PLAN

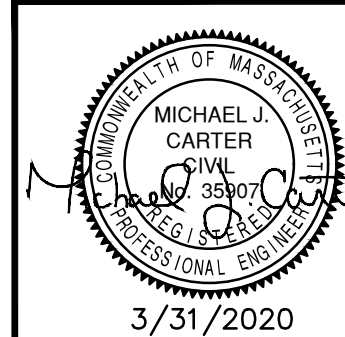
GREELEY STREET  
CLINTON, MASSACHUSETTS  
WORCESTER COUNTY

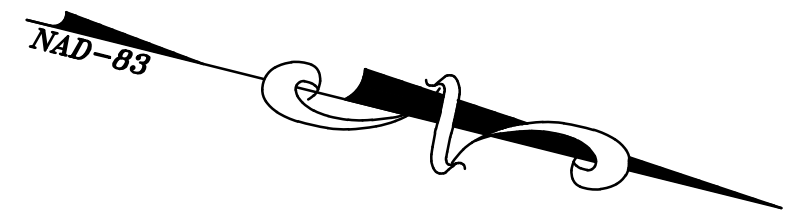
GCG ASSOCIATES, INC.

WILMINGTON MASSACHUSETTS

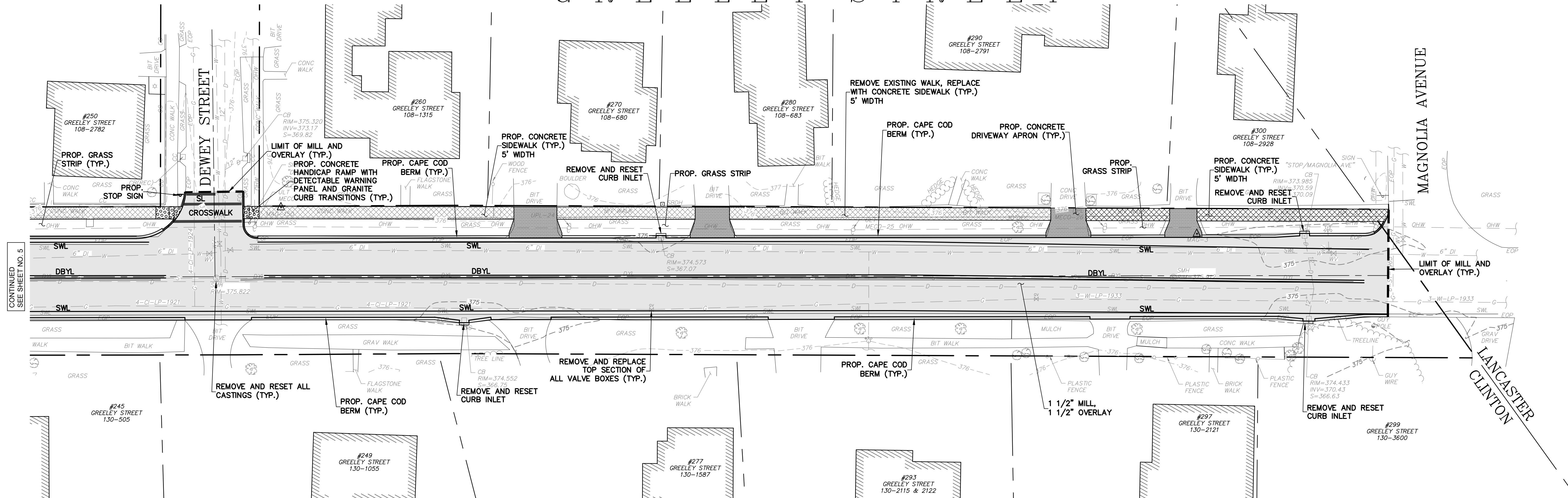
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JOB NO. \FILE NAME:	DESIGNED BY: R.S.T.	PLAN NO.
1921-ROAD-5	DRAWN BY: J.P.G.	5 OF 8
	CHECKED BY: M.J.C.	



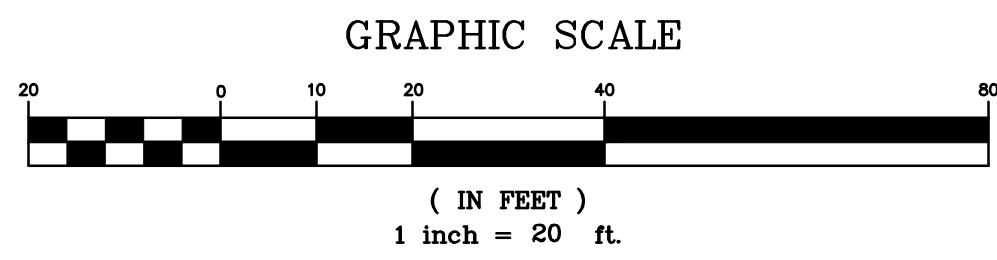


# G R E E L E Y S T R E E T



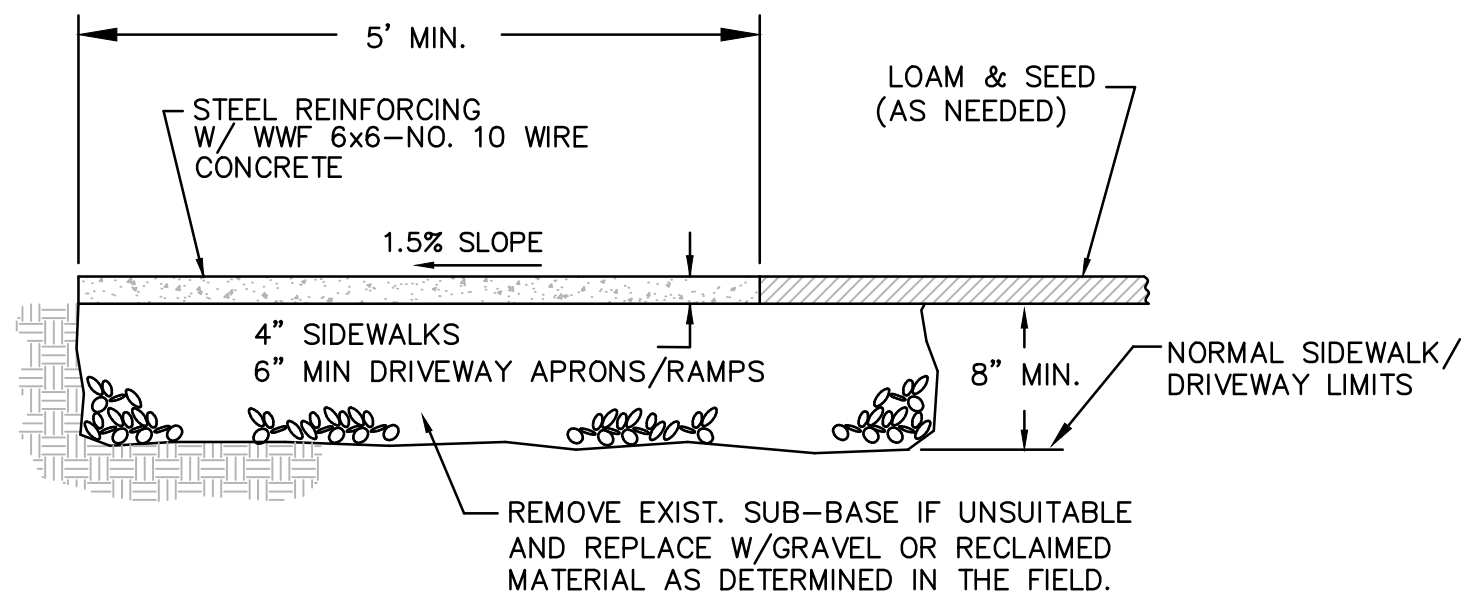
PLAN  
SCALE: 1" = 20'

EXISTING LEGEND	
	EX. DRAIN PIPE
	EX. SEWER PIPE
	EX. GAS MAIN
	EX. WATER MAIN
	APPROXIMATE PROPERTY LINE
	APPROXIMATE RIGHT OF WAY
	EXISTING EDGE OF PAVEMENT
SITE IMPROVEMENT LEGEND	
	RECLAIM EXISTING ROAD, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	MILL AND OVERLAY PAVEMENT 1 1/2" MILL, 1 1/2" PAVEMENT OVERLAY ADD LEVELING COURSES AS REQUIRED
	CEMENT CONCRETE SIDEWALK 8" COMPACTED GRAVEL, 4" CEMENT CONCRETE
	REMOVE EXISTING WALK, REPLACE WITH 4" CEMENT CONCRETE SIDEWALK
	CEMENT CONCRETE DRIVEWAY APRON 8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	HOT MIX ASPHALT DRIVEWAY APRON 8" COMPACTED GRAVEL, 2 1/2" HMA BINDER COURSE, 1 1/2" HMA SURFACE COURSE
	CEMENT CONCRETE WHEELCHAIR RAMP 8" COMPACTED GRAVEL, 6" CEMENT CONCRETE
	LIMIT OF WORK AS SPECIFIED
	GRANITE CURB
	CAPE COD BERM
	DRAINAGE PIPE



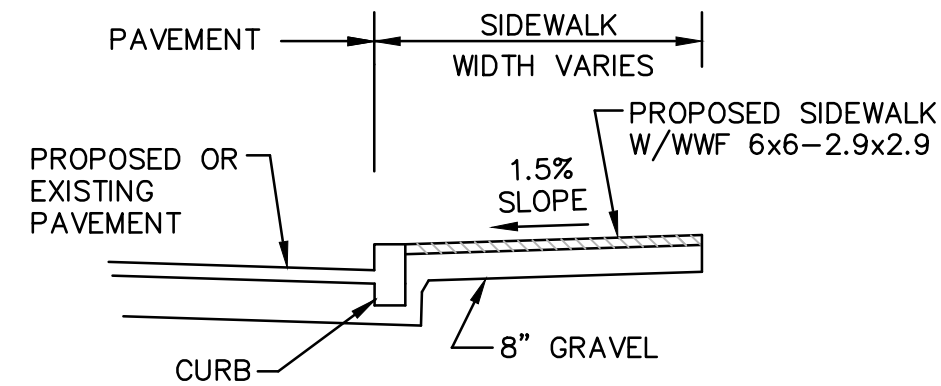
BID SET		
TOWN OF CLINTON PROPOSED ROADWAY PLAN		
Greeley Street CLINTON, MASSACHUSETTS WORCESTER COUNTY		
GCG ASSOCIATES, INC.		
WILMINGTON		MASSACHUSETTS
SCALE: 1" = 20'		DATE: MARCH 31, 2021
JOB NO. \FILE NAME:	DESIGNED BY: R.S.T. DRAWN BY: J.P.G. CHECKED BY: M.J.C.	PLAN NO. 6 OF 8



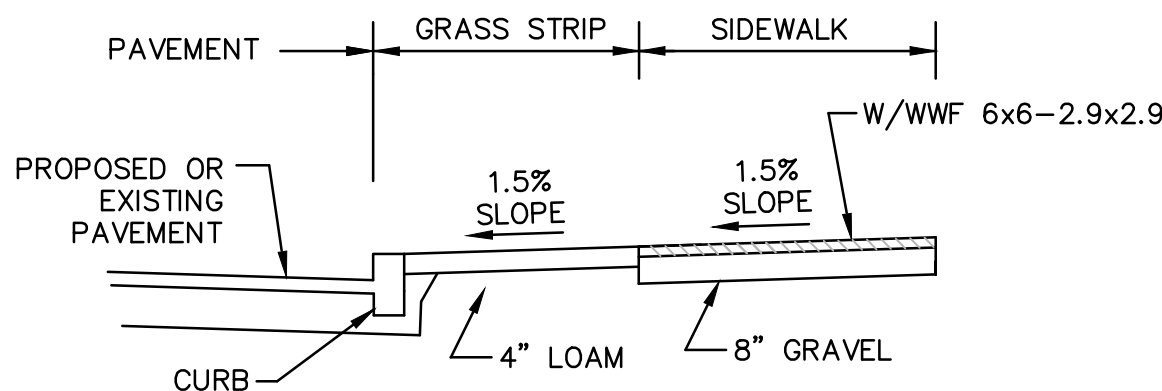


**SIDEWALK DETAIL**  
N.T.S.

NOTE: FURNISHING AND PLACING STEEL REINFORCEMENT SHALL BE INCLUDED IN THE UNIT PRICE FOR CONCRETE SIDEWALK.

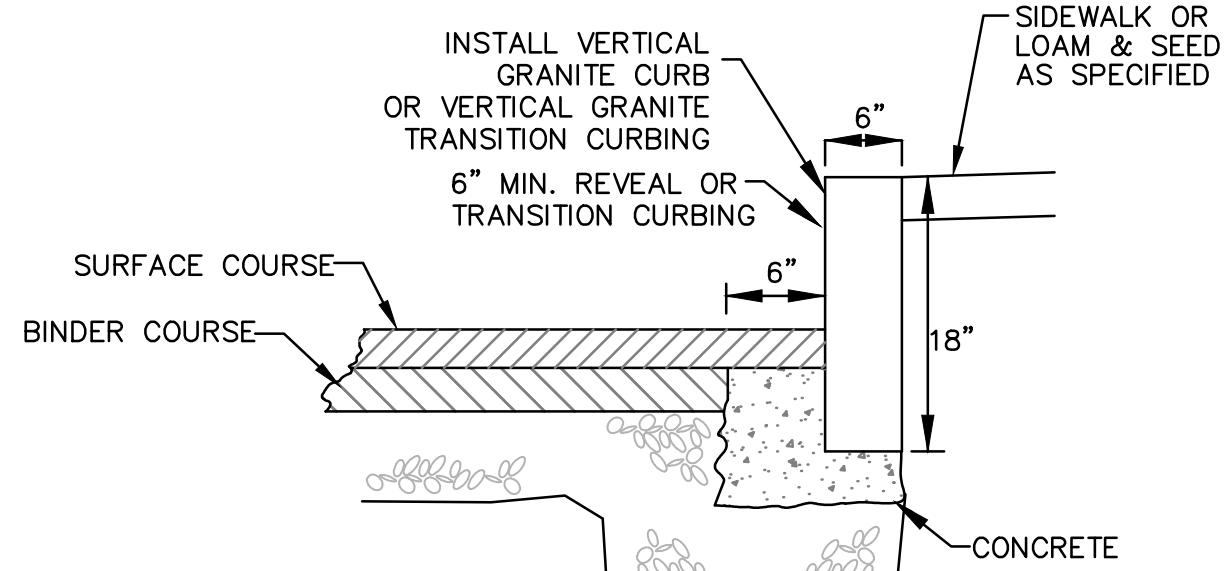


**SIDEWALK WITHOUT GRASS STRIP**

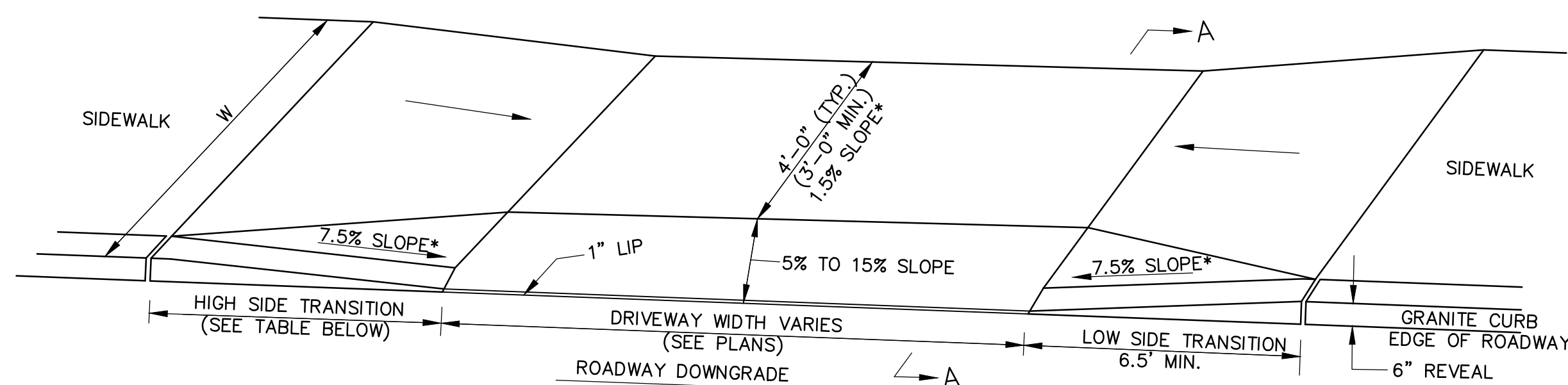


**SIDEWALK WITH GRASS STRIP**

**TYPICAL SIDEWALK CROSS SECTION**  
N.T.S.



**VERTICAL GRANITE CURB**  
N.T.S.

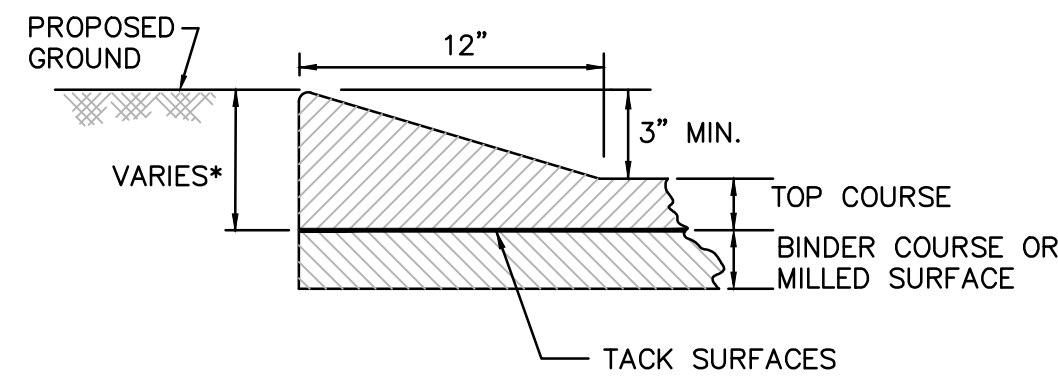


**SECTION A-A**

**SIDEWALK THROUGH DRIVEWAYS WITHOUT CURB RETURNS**  
NOT TO SCALE

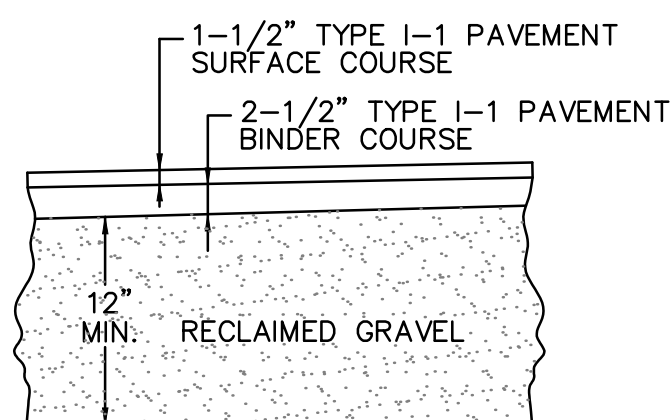
**NOTES:**

- GRAVEL IN AREAS OF EXISTING SIDEWALKS WHICH ARE BEING REMOVED OR REPLACED IN THE SAME LOCATION SHALL BE REGRADED AND SUPPLEMENTAL GRAVEL ADDED AS DEEMED NECESSARY. ADDITIONAL GRAVEL REQUIRED SHALL BE INCLUDED IN THE ASSOCIATED SIDEWALK ITEM.
- EXCAVATION AND PLACEMENT OF GRAVEL REQUIRED FOR NEW SIDEWALKS, WIDENING SIDEWALKS AND PAVED AREA SHALL BE INCLUDED IN THE ASSOCIATED SIDEWALK ITEM. DISPOSAL OF THE EXCAVATED MATERIAL SHALL ALSO BE INCLUDED IN THE ASSOCIATED SIDEWALK ITEM.
- REMOVAL OF STUMPS AND CUTTING AND DISPOSAL OF ROOTS SHALL BE INCLUDED IN THE COST TO CONSTRUCT SIDEWALKS.



\* THIS DIMENSION VARIES WITH THE THICKNESS OF THE TOP COURSE

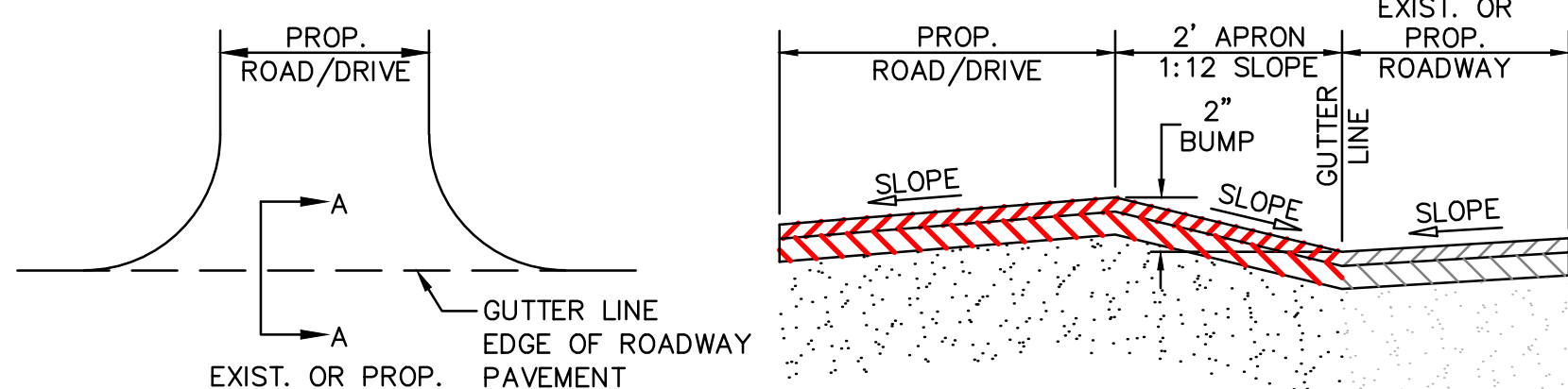
**MONOLITHIC CAPE COD (SHOE) BERM DETAIL**  
(NOT TO SCALE)



**NOTES:**

- PRIOR TO COMPLETING FINAL GRADING OF THE RECLAIMED BASE COURSE THE ENGINEER SHALL REVIEW GRADES ON ROAD TO DETERMINE THAT SUFFICIENT CURB REVEAL SHALL BE MAINTAINED. IF GRADES NEED TO BE ADJUSTED, THE CONTRACTOR SHALL REGRADE AS DIRECTED. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED UNDER THE RECLAMATION ITEM.

**TYPICAL ROADWAY PAVEMENT SECTION**  
NOT TO SCALE



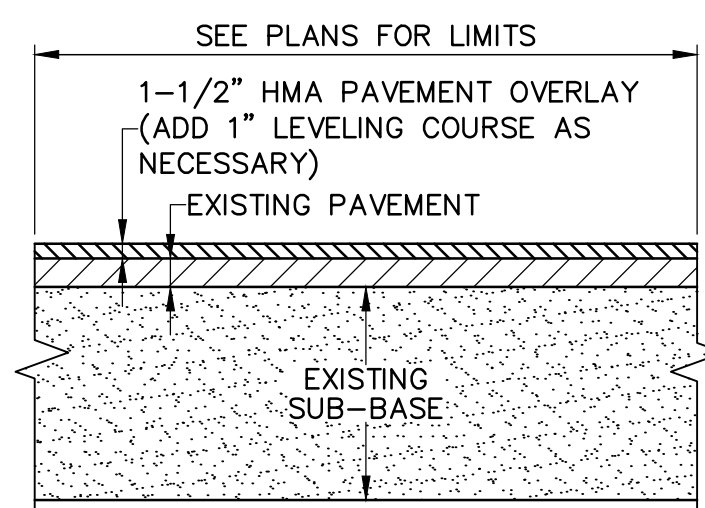
**PLAN**

**SECTION A-A**

**NOTES:**

- REPAIR 5' APRON AT EACH EXISTING DRIVEWAY AS NECESSARY.
- SAWCUT PAVEMENT WHERE EXISTING SHALL MEET NEW.
- SAND AND SEAL ALL JOINTS.

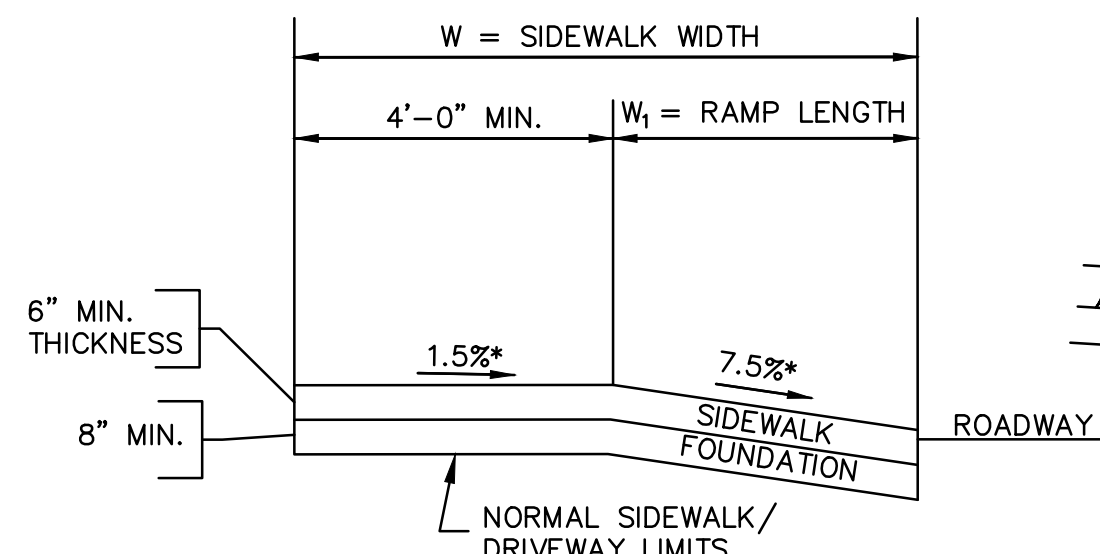
**DRIVEWAY APRON TREATMENT DETAIL**  
N.T.S.



**HMA PAVEMENT OVERLAY DETAIL**  
N.T.S.

**LEGEND**

- HSL = HIGH SIDE TRANSITION LENGTH. SEE M/E 107.9.0  
W = SIDEWALK WIDTH  
\* = TOLERANCE FOR CONSTRUCTION ± 0.5%  
CC = CEMENT CONCRETE  
HMA = HOT MIX CONCRETE



\* = TOLERANCE FOR CONSTRUCTION ±0.5%  
USEABLE SIDEWALK WIDTH PER ABB = W-W<sub>c</sub>  
RAMP LENGTH, W<sub>i</sub> = W - (4'-0") MIN.

**SECTION A-A**

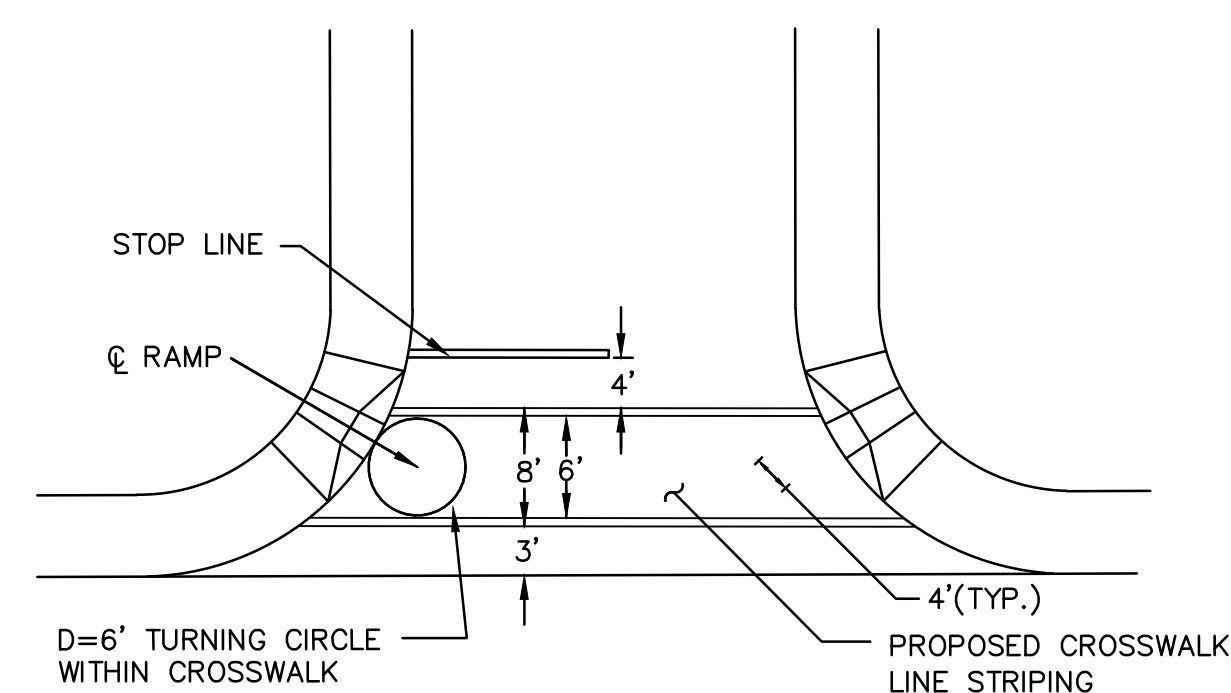
**DETAIL NOTES:**

- THE DIMENSIONS SHOWN AT ROADWAY EDGE ARE FIXED DISTANCES.
- RAMP CROSS SECTION TO BE SAME AS ADJACENT SIDEWALK; e.g DEPTH OF SURFACES.
- PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
- ALL HANDICAP RAMPS SHALL BE PORTLAND CEMENT CONCRETE.
- CURBING FOR ALL CONCRETE RAMPS SHALL BE GRANITE CURB.
- THESE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IF EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE.

ROADWAY PROFILE GRADE %	*HIGH SIDE TRANSITION LENGTH
0	6'-6"
> 0 - 1	7'-8"
> 1 - 2	9'-0"
> 2 - 3	11'-0"
> 3 - 4	14'-0"
> 4	15'-0" MAX.

\* BASED ON DESIGN SLOPE = 7.5% AND A CURB REVEAL OF 6".

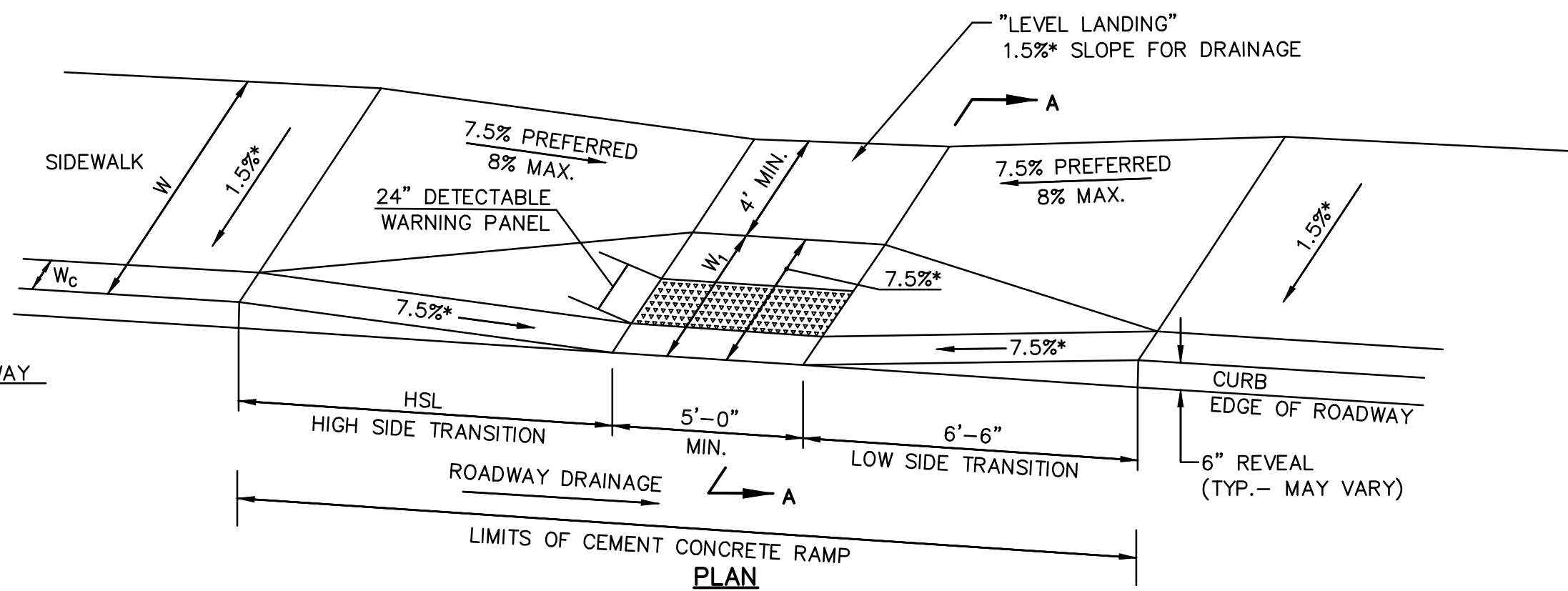
**CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS**



**NOTES:**

- CROSSWALKS SHALL BE PAINTED AT ALL PAIRED WHEELCHAIR RAMP LOCATIONS WITHIN THE LIMITS OF WORK.
- THE CROSSWALKS AND STOP LINES SHALL BE PAINTED WITH 12" WIDE, WHITE REFLECTORIZED, EPOXY PAINT IN THE PATTERN SHOWN OR AS DIRECTED BY THE ENGINEER

**PAIRED WHEELCHAIR RAMP & CROSSWALK DETAIL**  
NOT TO SCALE

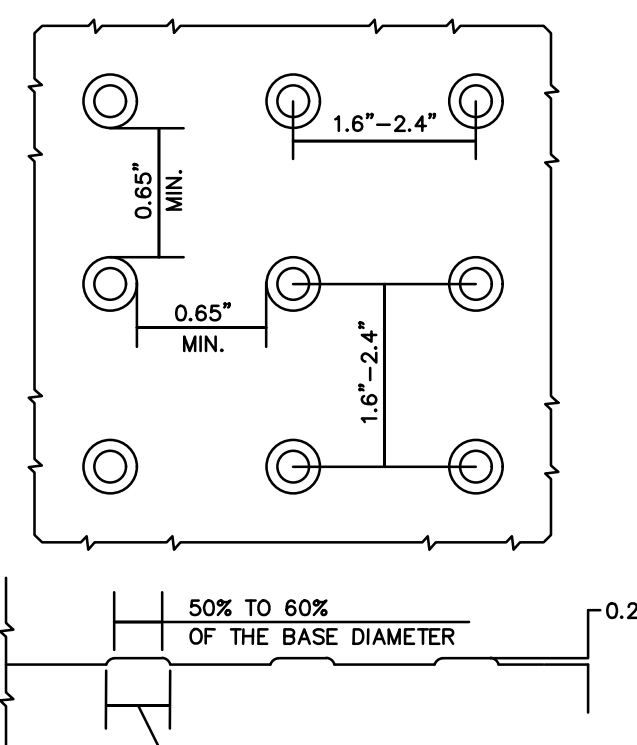


**WHEELCHAIR RAMP NOTES**

- ROADWAY SIDEWALK CROSS SLOPES, FOR BRICK, CEMENT CONCRETE, AND BITUMINOUS CONCRETE, AS INDICATED IN THE STANDARD SPECIFICATIONS, WILL BE 1.5%. A CONSTRUCTION TOLERANCE OF ±0.5% IS ACCEPTABLE ON ROADWAY SIDEWALKS. IN ACCORDANCE WITH 521 CMR THE RULES AND REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD (AAB), THE SIDEWALK CROSS SLOPE CANNOT EXCEED 2.0%.
- AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 3' SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (UTILITY POLES, SIGNS, SIGNAL FOUNDATIONS AND MASTS, MAILBOXES, ALONG DRIVE OPENINGS, ETC.).
- THE WHEELCHAIR RAMP SLOPES AND SIDE SLOPES (TRANSITIONS) WILL BE 7.5% WITH A CONSTRUCTION TOLERANCE OF ±0.5%. HOWEVER, THESE SLOPES MAY BE FLATTER WHEN WARRANTED BY SURROUNDING CONDITIONS.
- IF THE ROAD PROFILE EXCEEDS 4%, THE HIGH SIDE TRANSITION LENGTH UNDER ANY CONDITIONS NEED NOT EXCEED 15'.
- IN NO CASE WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED ON THE TRAFFIC APPROACH SIDE OF THAT STOP LINE.
- FIXED OBJECTS (I.E. UTILITY POLES, HYDRANTS, SIGNS, SIGNAL FOUNDATIONS, ETC.) MUST NOT ENCRUCH UPON ANY PART OF THE WHEELCHAIR RAMP INCLUDING TRANSITION SLOPES.
- AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP, EXCLUDING CURB TRANSITIONS, TO BE LOCATED OUTSIDE THE CROSSWALK OR PEDESTRIAN TRAVEL PATH. THE WHEELCHAIR RAMP ENTRANCE IS TO BE CENTERED IN THE CROSSWALK OR PEDESTRIAN TRAVEL PATH WHENEVER POSSIBLE.
- CATCH BASINS WHICH ARE IN THE VICINITY OF A WHEELCHAIR RAMP SHALL BE LOCATED UPGRADE OF THE RAMP ENTRANCE.
- THE ENTRANCE OF A WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
- TESTING SURFACE: WHEN TESTING WITH A STRAIGHTEDGE PLACED PARALLEL TO THE LINE OF THE SLOPE THERE SHALL BE NO DEVIATION FROM A TRUE SURFACE IN EXCESS OF 1/4".
- SIDEWALK CONSTRUCTION SHALL BE IN CONFORMANCE WITH MASS HIGHWAY CONSTRUCTION STANDARDS FOR WHEELCHAIR RAMPS.

**TYPICAL WHEELCHAIR RAMP CONDITION**

NOT TO SCALE



**STAMPED CONCRETE DETECTABLE WARNING PANEL**

NOT TO SCALE

**BID SET**

**TOWN OF CLINTON**  
**CONSTRUCTION DETAILS I**

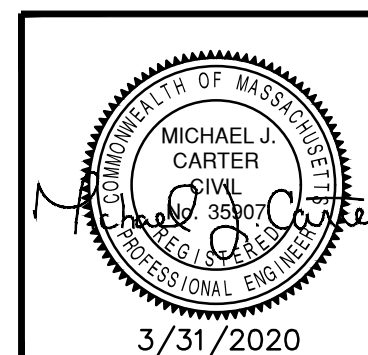
**GREELEY STREET**  
**CLINTON, MASSACHUSETTS**  
**WORCESTER COUNTY**

**GCG ASSOCIATES, INC.**  
WILMINGTON MASSACHUSETTS

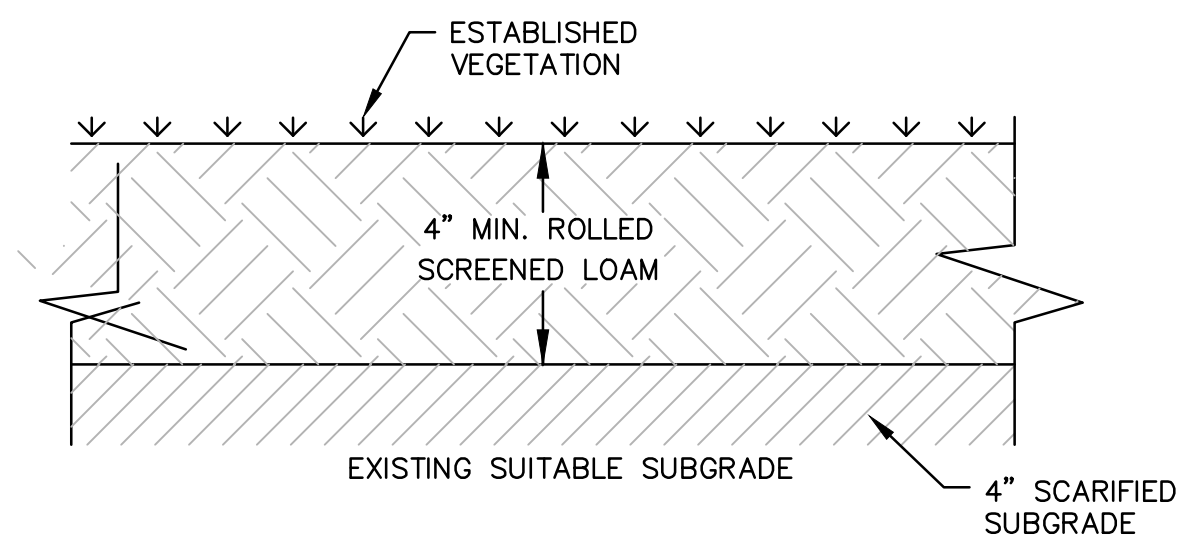
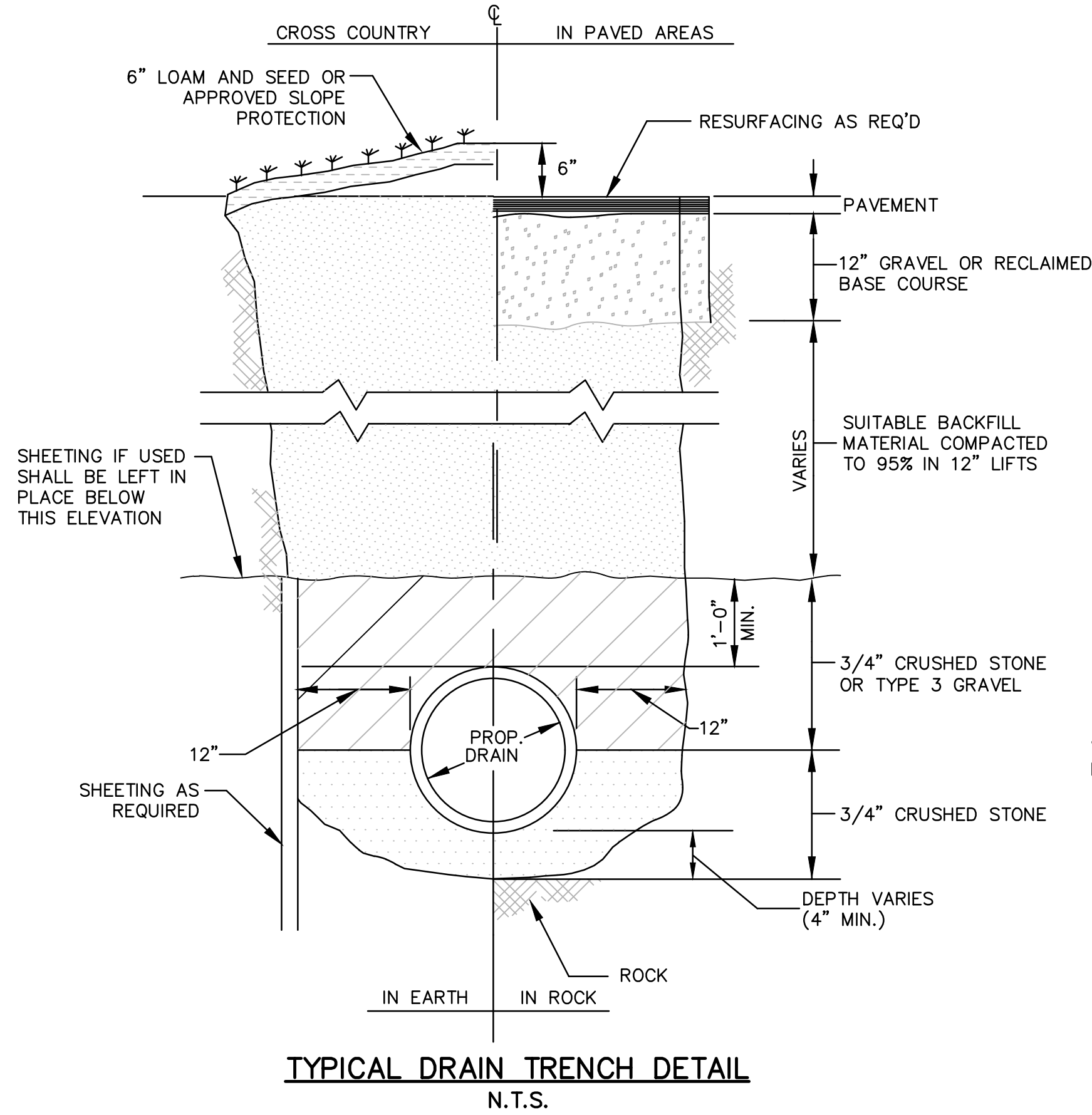
SCALE: AS NOTED DATE: MARCH 31, 2021

JOB NO./FILE NAME: 1921-NOTES, LEGEND AND DETAILS  
DESIGNED BY: J.P.G.  
DRAWN BY: J.P.G.  
CHECKED BY: M.J.C.

PLAN NO.  
7 OF 8

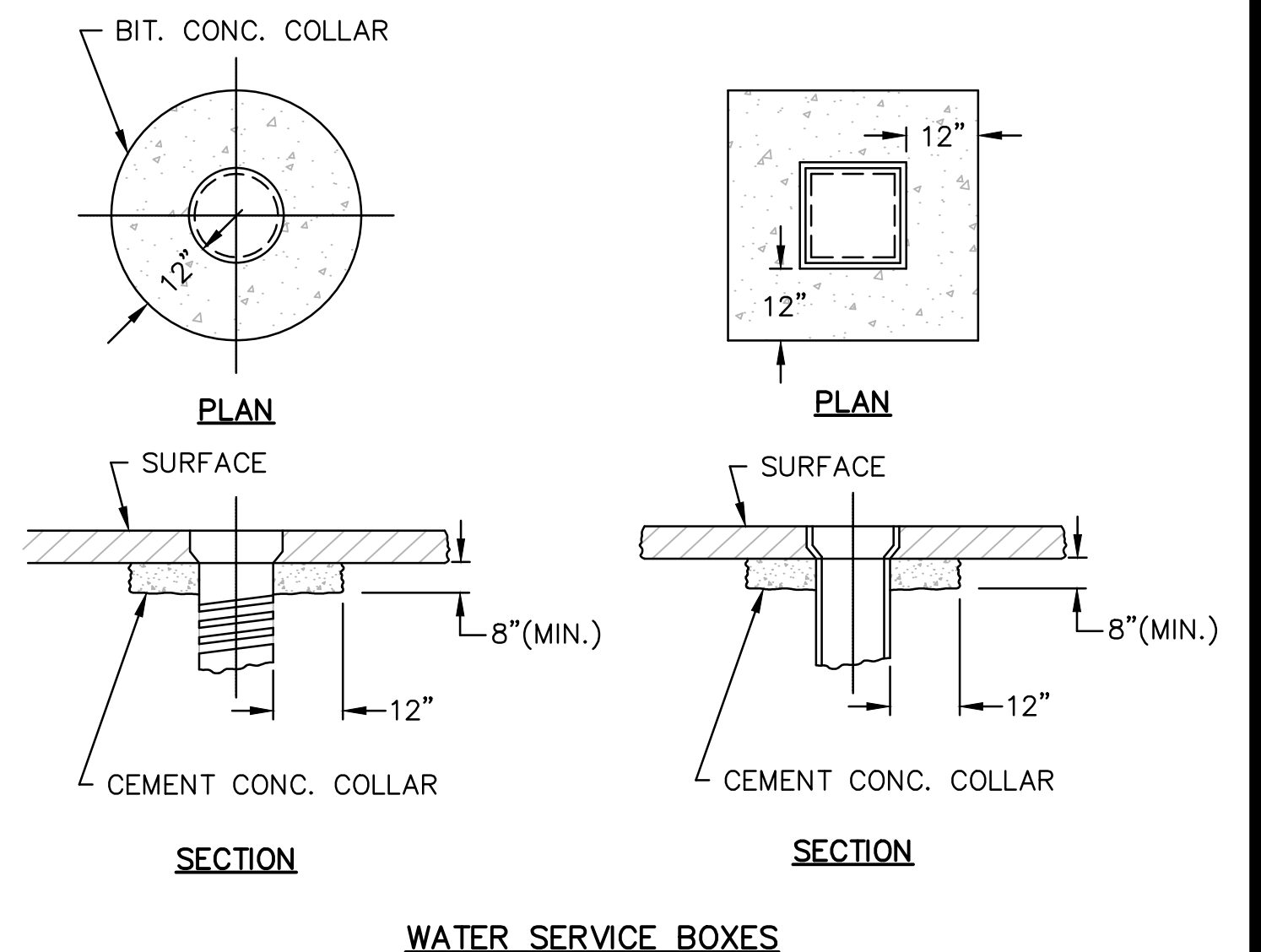
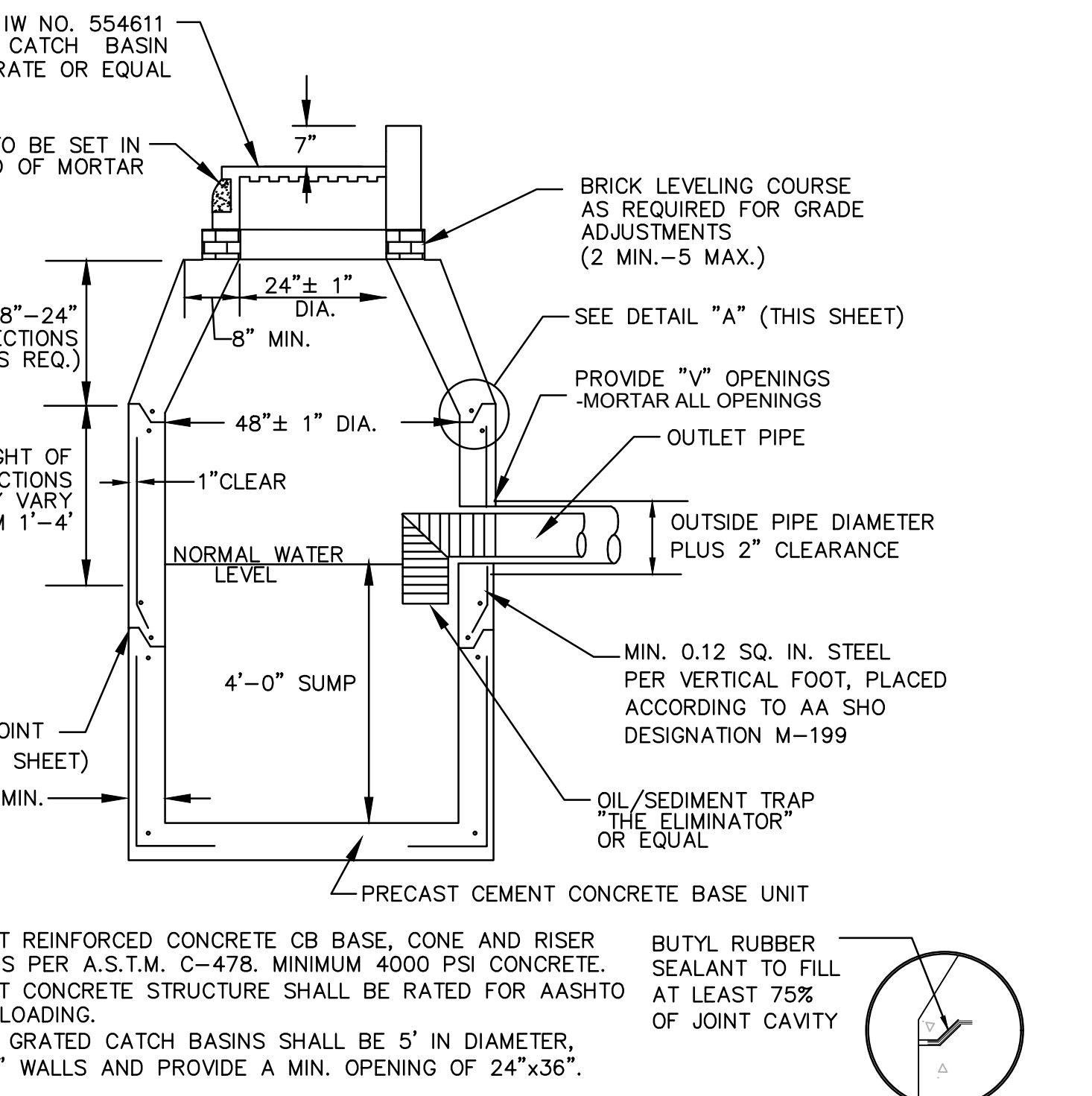
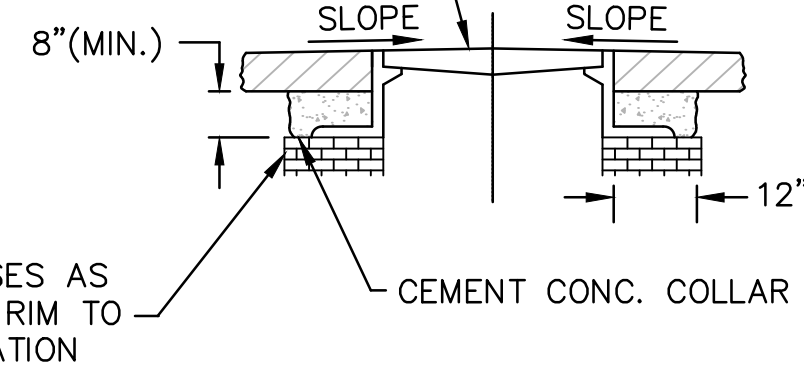
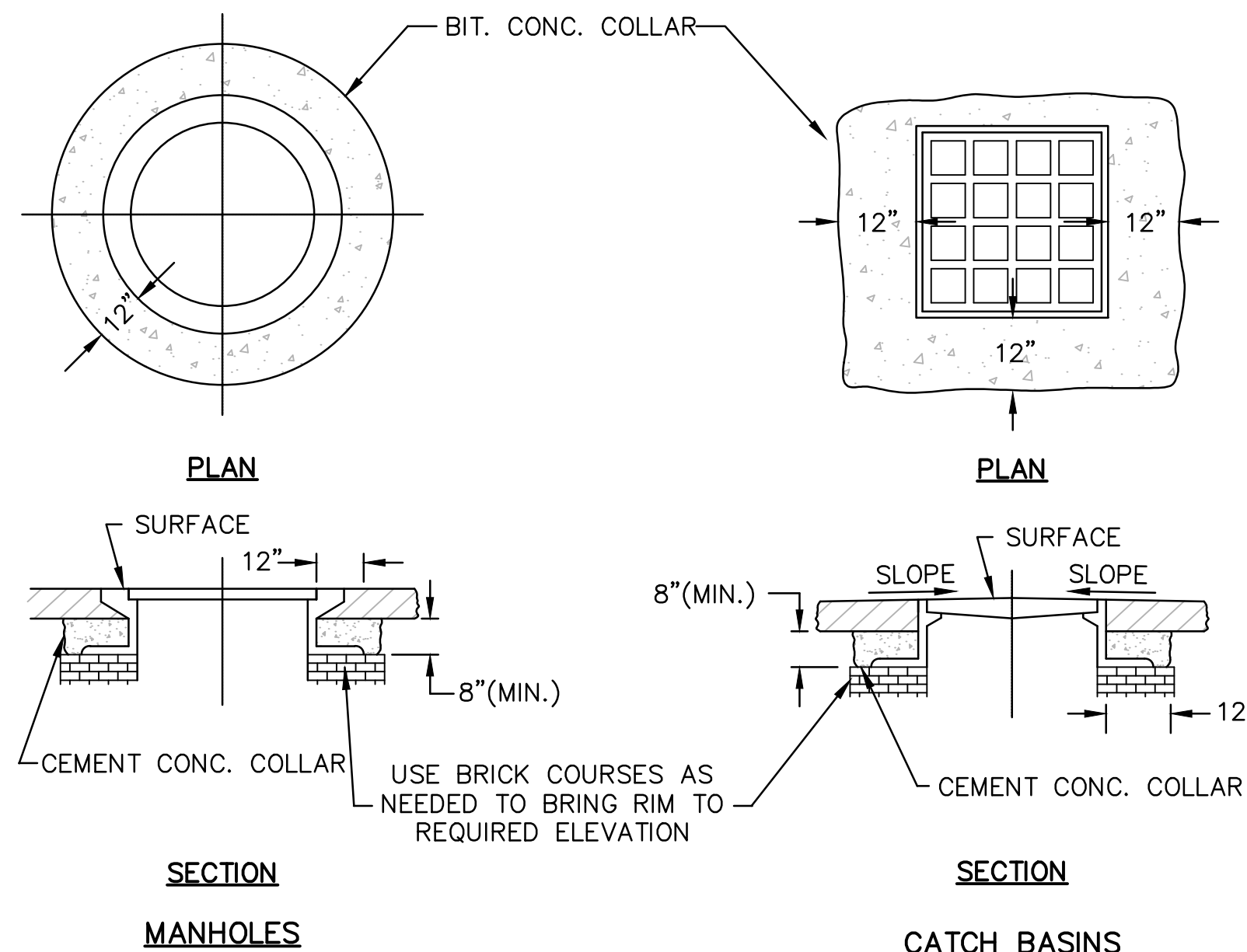
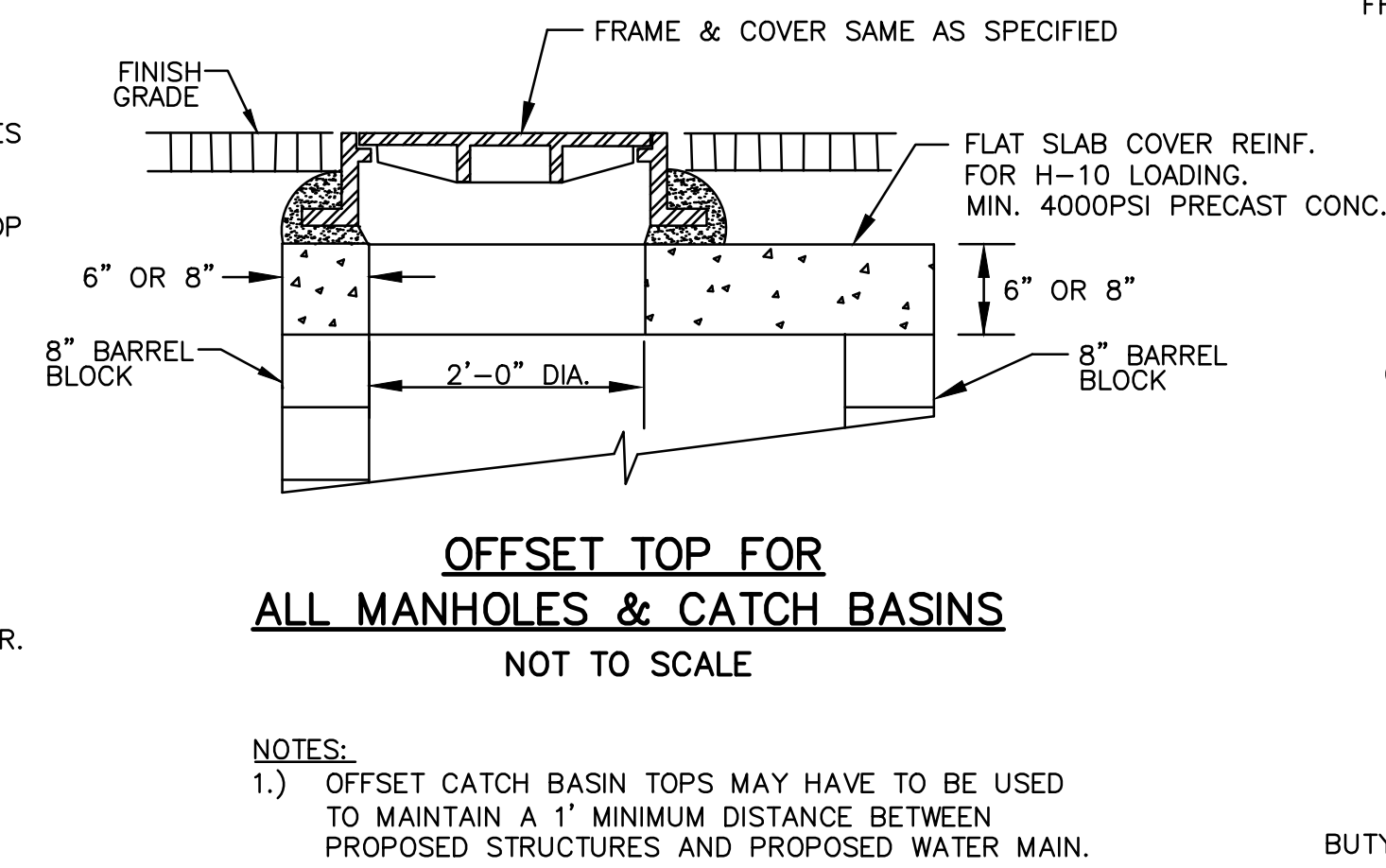
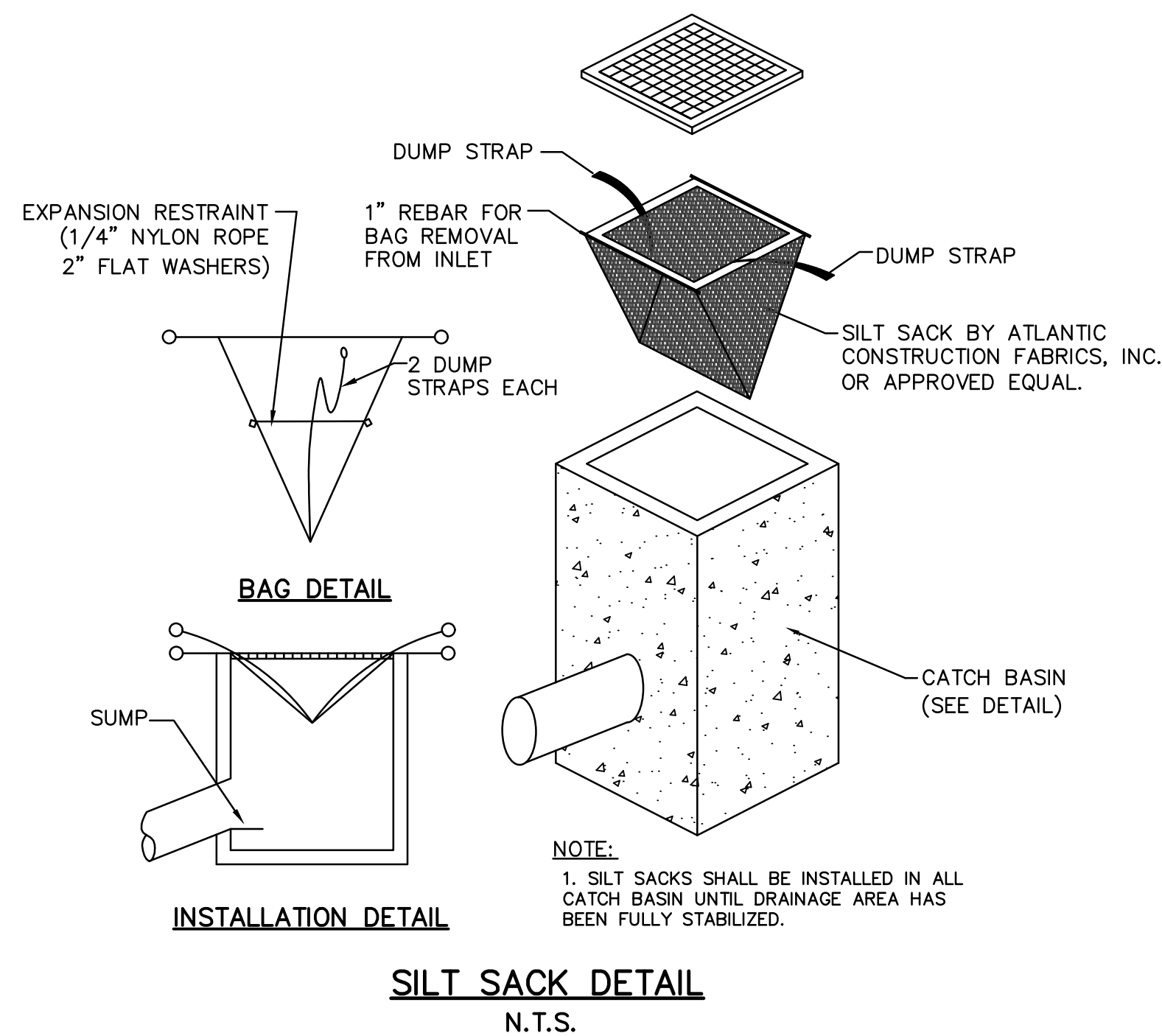
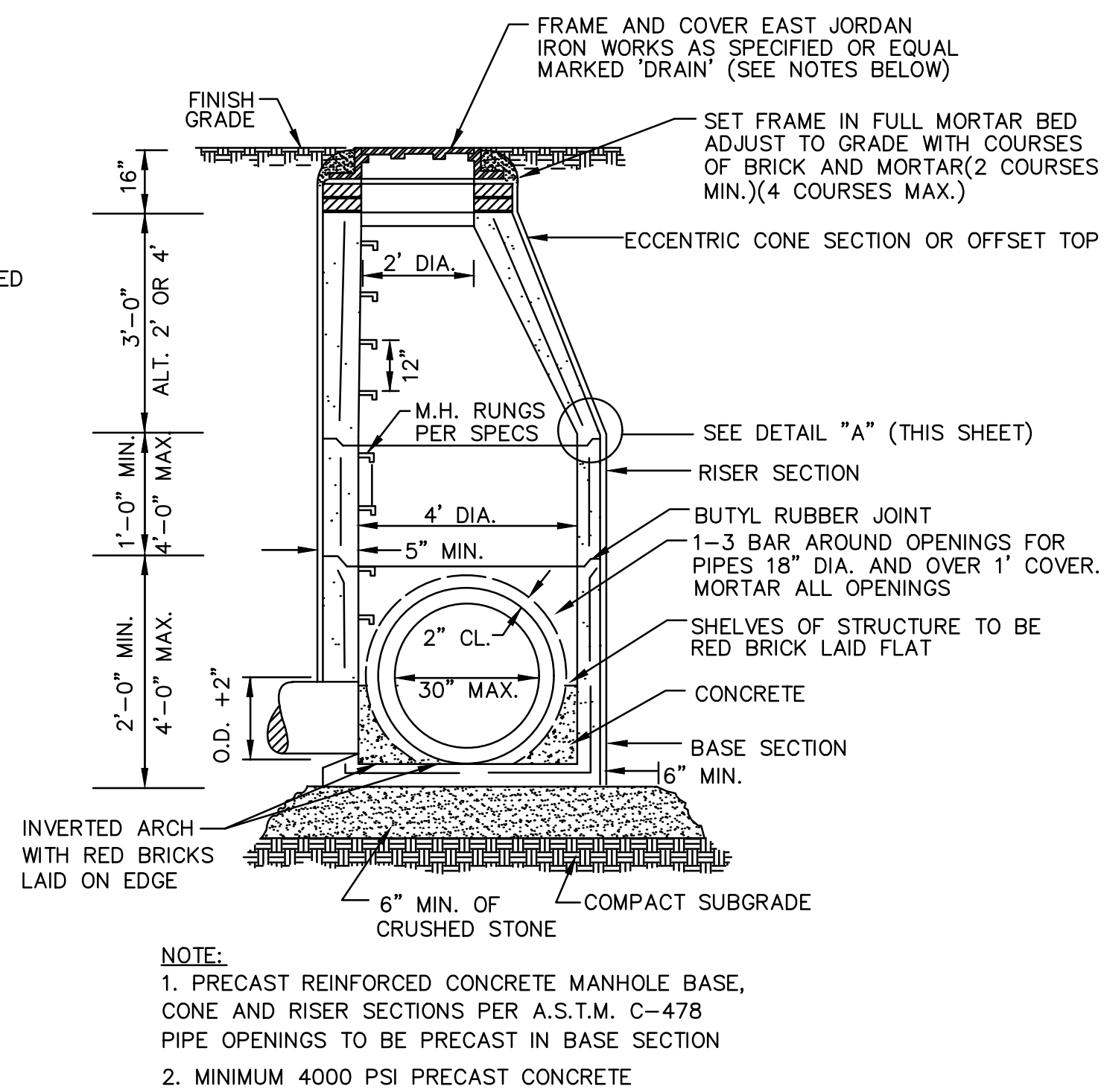




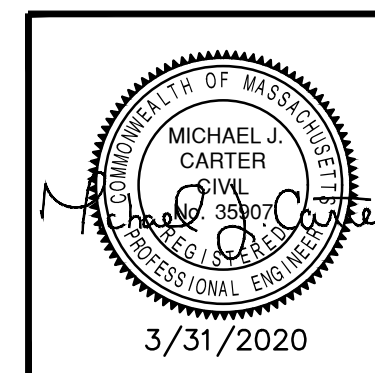


- NOTES:**
1. ALL DISTURBED AREAS TO BE LOAMED WITH A MINIMUM OF 4-INCHES OF SCREENED LOAM IN ACCORDANCE WITH MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 751. LOAM MATERIAL SHALL MEET MHD M1.05.0 MATERIAL SOURCE AND IN-PLACE LABORATORY ANALYTICAL TESTING OF LOAM FOR COMPLIANCE WITH M1.05.0 MAY BE REQUIRED BY THE OWNER PRIOR TO PLACEMENT AND FINAL ACCEPTANCE.
  2. AFTER PLACEMENT, ROLLING AND RAKING OF THE SCREENED TOPSOIL, SEEDING AND FERTILIZING OF THE TOP SOIL SHALL BE IN ACCORDANCE WITH MHD STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 765. IF NECESSARY, REFERTILIZATION SHALL OCCUR IN ACCORDANCE WITH MHD SECTION 766.
  3. MULCHING SHALL BE IN ACCORDANCE WITH MHD SECTION 767, FOR AREAS SPECIFICALLY INDICATED ON THE DRAWINGS, OR AS FIELD CONDITIONS MAY WARRANT.
  4. SEED MIX, FERTILIZER AND MULCHING MATERIALS SHALL COMPLY WITH SECTION M6 OF MHD STANDARD SPECIFICATIONS FOR ROADSIDE DEVELOPMENT MATERIALS. SUBMITTAL REQUIREMENTS MAY INCLUDE PRODUCT LABELS OR LABORATORY ANALYTICAL TESTING, AS MAY BE REQUESTED BY THE OWNER OR THEIR AGENTS.

**LOAM & SEED**  
NOT TO SCALE



**WATER SERVICE BOXES**



<b>BID SET</b> <b>TOWN OF CLINTON</b> <b>CONSTRUCTION DETAILS II</b> <b>GREELEY STREET</b> <b>CLINTON, MASSACHUSETTS</b> <b>WORCESTER COUNTY</b>		
<b>GCG ASSOCIATES, INC.</b> WILMINGTON MASSACHUSETTS		
SCALE: AS NOTED	DATE: MARCH 31, 2021	
JOB NO. \FILE NAME:	DESIGNED BY: J.P.G.	PLAN NO.
1921-NOTES, LEGEND AND DETAILS	DRAWN BY: J.P.G.	8 OF 8
	CHECKED BY: M.J.C.	